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INDIAN
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THE RISE IN THE RURAL STANDARD OF LIVING IN THE PUNJAB[1]

MALCOLM DARLING
Income Tax Commissioner of the Punjab

IMPORTANCE OF THE SUBJECT

In this article it is proposed to give a brief account of the rise in the standard of living that has taken place in the Punjab village during the last 20 or 30 years. That a rise has taken place no one would probably deny, but few of us perhaps could describe in any detail the change that has occurred. That is my first excuse for touching on what may at first sight appear a somewhat hackneyed subject. My second is that when, as in India, a standard of living has been stabilised for centuries, a sudden rise is likely to have far-reaching effects. Dormant forces are awakened and the competitive struggle for life begins: those who fare badly envy those who do well, and those who do well, are dissatisfied that they do not do better. Discontent (sometimes called divine) is liable to become general, and if it coincides with political change, the new wine may burst the old bottles. Below a certain standard of living men tend to be as inarticulate as the beasts, but once they rise above this point they not only feel but assert their grievances. The history of the peasant in Germany and France contains more than one warning of this. For instance, the German Peasants' War of 1524 took place not in the north and East where the peasants were little better than serfs but in the West and South where they were "accustomed to well-being and where their holdings were thick on the ground".[2] In the Punjab last year we had a hint of a similar possibility in the Sikh Babbar Akali movement with its outbreak of lawlessness in the prosperous districts of Hoshiarpur and Jullundur. Though political in aim, it can hardly have been a mere coincidence that the movement appeared in the two districts where holdings are smaller than almost anywhere else in the province and where the standard of living is unusually high. It may be guessed that the ex-soldiers and returned emigrants who mainly supported it were discontented because with only a few acres they found it difficult to gratify the new tastes acquired during the war, and the same impulse may very possibly be at work amongst the hundreds who are now tramping across the central Punjab to Jaito. We must not forget that during the war many thousand Punjabis saw how men lived in western Europe and that when they returned to their villages they realised for the first time the many drawbacks of their homes. They themselves, too, during the war were better clothed and fed than they had ever been before and the return to the simpler standards of civilian life cannot have been entirely to their taste.

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[1] This article (with a few minor alterations) forms a chapter of a book that the author is shortly publishing on the economic condition of the peasant proprietor in the Punjab.

THE OLD STANDARD

Before describing what these standards are, a word must be said about the past. Sixty or seventy years ago all a man's desires might be summed up in the words of the Karnal villager:—" Let me see ten good oxen and ten maunds of mixed grain, the milk of a buffalo and some sugar to stir into it, and a fair assessment after harvest:

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[2] H. D. Irvine, *The Making of Rural Europe*, 1923, p. 78.

God give me so much, and I wont say another word".[3] In those days few cultivators had more than two meals a day, and for the most part life was sustained on cakes of flour made of wheat or millet, flavoured with turnip, onion or melon (according to the season) and washed down with butter-milk. Dress, too, was of the simplest, and of a comparatively prosperous district like Sialkot we read that "a *langottee* of white or blue cloth round the loins, a scarf over the shoulder, a *pugree* of limited dimensions and a pair of shoes compose the daily suit of the majority".[4] The '*kurta*' or shirt which everyone wears to-day is not even mentioned. Much the same is true of Ambala further south. "The dress of the men consists of a turban, a *dhoti* or cloth fastened round the waist and drawn up between the legs, shoes, and in the cold weather a sheet or counterpane stuffed with cotton. Only a few of the better dressed men wear the jacket or coat so common in other provinces".[5]

A PROSPEROUS COLONY VILLAGE

Once the poorest province in India, the Punjab is now probably the richest. The quickest way to realise this is to visit a thriving colony village. Round Lyallpur few can be better off than Chak 208, where the Ludhiana Sikh may be seen at his best. It is early spring, and we approach it through fields of young wheat stretching away to the horizon in a sea of green, splashed with the brilliant yellow of the mustard flower and broken by islets of sugar-cane. A track just broad enough for a bullock cart takes us through a young orchard, and a moment later we are walking down one of the two main streets of the village, with high clean mud-plastered walls on either side, and, as we pass, we catch glimpses through the almost noble gateways of roomy courtyards full of children and

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3 *Karnal Settlement Report*, 1883, p 138.
4 *Sialkot S. R.*, 1865, p. 19.
5 *Ambala Revised S. R.*, 1853, p 87.

cattle. The two streets form a cross meeting at the village well in the centre, and instead of the usual crooked 10 foot lane they are 40 feet wide and run straight from end to end, so that in the stifling heat of summer the slightest breeze finds its way into the heart of the village. The well where they meet has an imposing masonry crown, fitted with cisterns and taps which are kept running for three hours every morning. A water-carrier is employed with his buffalo for the purpose, and at harvest time, after the simple manner of the country, each villager gives him 32 lbs. of grain for every water-pot in daily use. The saving of time and trouble is immense, for it is a tedious business to have to draw water every day for the whole family from a depth of 50 or 60 feet. Another good instance of the spontaneous co-operative effort which is characteristic of Indian village life, is the building of a fine red brick *Gurdwara* at a cost of Rs. 3,000 where the *Granth Sahib* (the Sikh Bible) is housed in a spacious room 35 feet long, the floor of which is covered with excellent matting made in the local jail. If there is a wedding with many guests, the *Granth Sahib* accommodatingly makes way for them and remains in a smaller room till they depart. The head of the village is the *Zaildar* who with his 200 acres, which he farms himself, is something of a landlord. His style of living is very different from anything that could have been found 30 years ago. Instead of the usual mud-plaster, his house is made entirely of brick and has an imposing gate way, vestibule and porch, all in one, supported on iron girders brought from Karachi and fitted throughout with well-seasoned timber felled in the distant hills. On either side of the porch is a good-sized room for guests, and in his own room were comfortable English chairs, a duplex lamp, hat pegs and even a set of account books. In Ludhiana, he explained, he never kept accounts, but now that he has to farm 200 acres he cannot get on without them. It is rare in the Punjab to find a man farming more than 50 acres himself, and in this case most people would have put in tenants. But, instead of this, he associates with himself a number of cultivators who each get one ninth of the produce of the area they cultivate. He has thus been able to reap the full benefit of the high prices, and the simple yet ample comfort in which he lives is the result.

Over 2,000 acres are under cultivation, and the area is distributed amongst 89 families who (excluding the *zaildar*) cultivate an average of 22 acres apiece. Compare this with the 5 or 6 acres average of the central Punjab. Moreover, when an owner dies, his land is not cut into strips varying with the quality of the soil, but is divided into no more fields than there are heirs. There are ten *pukka* brick houses in the village, and even those made of mud and plaster look unusually well-built.

The only person in debt to the village bank—co-operation is well established—is a man who had recently borrowed Rs. 600 for a wedding. Everyone I saw was well clothed, and three meals a day with an abundance of milk—a large number of buffalos are kept—is said to be the rule. Meat, though not eaten every day, is common enough. Relative to their needs, these villagers are probably better off than most peasants in southern Europe, and in far better case than the bulk of the educated classes in central and eastern Europe who for the milk alone would be thankful. Even the labourers are prosperous. In the western Punjab Rs. 5 a month with a blanket and a pair of shoes at the end of the year is all that a man can expect. Here, and in the colony generally, he gets twice that amount and food and clothing as well; and if he is sufficiently skilled to work in a garden, he may get as much as eighteen or twenty rupees a month. Hours of labour, too, are less exacting and better work is done in consequence. A marked improvement in the condition of the labourer, both in housing and food, is reported from most of the province, and is one of the most satisfactory features of the rise in the standard of living.

All through the village there is an atmosphere of development. Already one of the new generation has matriculated and four more have been in for the examination though without success. The school is well attended and is an integral part of the village. Agriculturally there is every sign of progress. Good seed is obtained from the farm at Lyallpur, and a large number of modern implements are in use, including, it is said, 5 chaff-cutters, 14 reaping machines and 15 bar-harrows, which is far above the average. Four of the reaping machines have been purchased by groups of villagers acting together, as they cost more than the ordinary proprietor can afford. A pleasant sight are the young orchard gardens springing up round the village with their promise of oranges, bananas and loqats. The taste for gardens is spreading and is in part a result of the war, when many a Punjabi enjoyed the luscious fruit of France. Less attractive, but possibly more useful, is the flour mill with a hiccuping oil engine run by the local blacksmith. Costing from Rs. 1,500 to Rs. 2,000, they are now to be found all over the colony, and everywhere the air is full of their hiccups. As I was leaving the village, an old zamindar begged me to remove the local mill, as it kept him awake at night and the smoke—he slept on the roof—was ruining his eyes. He was too old (and perhaps too wise) to be willing to pay the price demanded by 'progress' in a mechanical age even for the smallest advance.

As is generally the case, there was not a word of gratitude to Government. On the contrary, "look how Government has scored", they said; "the district used to pay a lakh of land revenue and now it pays a crore." They evidently thought that Government, like an old-fashioned Raja, put the whole amount into its pocket. The attitude is characteristic of the times and recalls the age at which the adolescent boy is tempted to deny all obligation to his parents. It contains, too, a hint of the discontent which, as we have already remarked, is only too apt to accompany a rise in the standard of living. As long as life continues unchanged, it occurs to no one to complain, but, once change begins, people cannot bear it to stop, and, if it stops to their disadvantage, Government is invariably blamed. Already people are beginning to regard it as a grievance that Government does not give them more land.

THE RISE IN THE STANDARD OF LIVING IN THE CANAL COLONIES

This village represents the high-watermark of rural comfort and development in the Punjab. That is why it has been described at length. At the same time, it is by no means an isolated case. There are hundreds of villages as prosperous, though perhaps few quite as progressive. Everywhere in the colonies brick houses abound and luxuries, unknown not many years back, are fast coming in. A rug now often covers the *charpoy* (bed); on the floor a well woven *durrie* takes the place of the old dirty matting; and, if a man has plenty of land, a *punkha* goes up overhead. Since the war too, when men had to travel far and wide, has come a taste for travel. The villager may now be seen going off to view the sights of Delhi and Agra and the beauties of Kashmir. Some even will go as far as Bombay. When, after the war, cloth touched a fabulous price, a large number of co-operative societies joined together to purchase it direct from Bombay and half a dozen of their members, ordinary cultivators, went off there for the purpose. On the whole, however, wants are still simple enough: a good house, a mare, occasionally a wife and, above all, land, are the main objects for which the cultivator desires wealth. Amongst the Sikhs a good deal is spent upon drink, a point that is made against them by a local poet in a popular ballad:—

"To the Sikh have been given lands,
But now up to their ankles in poverty
Lo ! they prosper before mine eyes,
Drink wine and roam with curled moustaches."

The Sikhs' love of drink is of course notorious. It arises partly from the fact that they work harder than anyone else, and hard work requires a stimulant. Drink is not, therefore, the demoralising influence that it is in some districts. A healthy public opinion, lacking in the latter, helps to keep it within bounds, and some classes are even said to drink less when they come to the colony. Money is wasted of course in the colonies as everywhere else, and in the year or two after the war, when silver at least was nothing accounted of, there was plenty of extravagance. Thus, in a report of that time we read of a number of colonists subscribing together to get dancing girls from Sialkot to celebrate the wedding of a pair who could not afford to do it themselves. But it is a sign of the times that with most the *natch* is no longer considered an indispensable part of a wedding. A main reason for all this is the spread of education. Throughout the colony there is almost a thirst for it, and that it is no mere desire for Government service is shown by the fact that, with the full consent of the people, compulsory education has recently been started in a few selected areas both in Lyallpur and Shahpur.

THE RISE OUTSIDE THE COLONIES

The influence of the colonies upon the province can hardly be exaggerated. From Amritsar alone over 100,000 have migrated to the *Bar*;[5] and in all the surrounding districts, if a cultivator has a *pukka* house, or better cattle than his neighbours, or a deposit in his village bank, or is using improved seed, it is ten to one that he has colony ties or has made money abroad. Even before the war the Lyallpur colony used to remit over 20 lakhs a year. If, then, the standard of living has risen in the colonies, it has naturally risen outside them as well. But the wealth acquired in the colonies is not the only factor in the case. The construction of 3,000 miles of metalled roads and of 5,000 miles of railway, the bridging of seven great rivers, some of them more than once, the maintenance of a well-paid army largely recruited from the province, the steady income derived from those who have emigrated to Australia, China and America, and above all the opening of the world's markets to the cultivator have all had their share in the process: and but for these factors, the rise in the standard of living must have been seriously checked by the great increase of population. In order to ascertain the effect of the change upon the mass of the people general enquiries have recently been made in different parts of the province, more especially in the central Punjab where the change has been greater than in the more outlying areas. The results of these enquiries will now be given under the three obvious heads of housing, clothing and food, of which food will be taken first as it is the basic need.

FOOD

"He that eats a *ser*", says a Multan proverb, "works like a lion, but he that eats only a quarter of a seer works like wood-ashes." Vegetarians and ascetics may think that the less they eat, the healthier they will be, but this is certainly not the case with those who have to live by their hands. Even in India, where on the whole men perforce eat less than they should the more exacting the labour the ampler the diet. At harvest-time, for instance, when everyone works 12 hours a day, meals are squarer than usual. If, then, a higher standard of work is to be maintained, as agricultural progress demands, it is important that more food should be available. Thanks to the canals this is the case, and, though most people deny that the cultivator eats more than he did, all agree that his diet has gained in variety and refinement. There are still parts of the Punjab, notably in the southwest, where many live with 'hard and pinching diet', and everywhere in times of scarcity (outside the colonies) belts have to be tightened; but for the most part, where two meals a day used to be the rule, it is now frequently three; and, as in England 200 years ago,[7] wheat has now become the staple food of the country. Maize, millets and barley are still consumed in their season, but to a much less extent than before, and there are many who use nothing but wheat all the year round. Another marked change is the greater abundance of vegetables, due to the spread of irrigation, without which in the Punjab they cannot easily be grown. Every kind of vegetable is now available, and cabbages, cauliflowers, potatoes, spinach and peas are all in demand. Where, too, the mango and the melon were the only fruit, there are now few villages, in the central Punjab at least, to which the orange does not penetrate, and for the well-to-do there are apples, pears and bananas as well. In spite of the vegetarian proverb—'eat meat and you are done' *(khawe mas, howe nas)*, more meat is eaten than before, especially amongst Muhammadans, and in many Sikh families it is no longer good form to offer *gur* at a wedding: the more refined *shakar* must take its place. Finally in some districts, notably in Ludhiana and

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[5] The name given to the desert before it was colonized.

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[7] It was from 1700-1750 that in England 'fine wheaten bread', previously a luxury of the well-to-day, became the staple food of the greater part of the country (*Economic Journal*, 1922, p 331).

Hoshiarpur, people are taking to drinking tea, a habit introduced by the soldier on his return from the war.

CLOTHING

After food come clothes. In the West it is sometimes supposed that people in India want few, if any clothes at all. In the Punjab, with its extremes of heat and cold, this is certainly not the case, for in January the wind will cut through the thickest clothes. It is something, therefore, to know that the *kurta* or shirt, once hardly seen, is now worn even by the poorest, and that most people have more bedding than they had. The old coarse woollen *chura* has been almost displaced by the blanket, and here and there the English pillow has appeared. In dress the coarser materials are giving way to the finer. Under Mahatma Gandhi's influence country cloth came into fashion again, and in Muzaffargarh and Dera Ghazi Khan, and to a great extent in the north, it is still the rule; but elsewhere machine-made cloth is more and more taking its place, and there are few now who have not at least a muslin puggaree to wear on state occasions. Change has gone furthest of all in the *zenana*. The short economical '*choli*' is being replaced by the longer well-cut *kurta*: the voluminous *gaggra* by the lighter *pyjama* or the muslin *salwar*. Clothes now go oftener to the wash—in the old days some are said never to have been sent at all—and all but the smallest villages have their dhoby. Shoes, formerly a luxury, are now a necessity, and to go bare-footed is a mark of extreme poverty. In old days a pair of shoes was only kept for a wedding, a funeral or a long journey, and even among the well-to-do many women were glad enough to get their husbands' cast-off shoes. Now some are not content till they can trip about in the zenana in a pair of fancy slippers. Jewelry of course is in greater demand than ever, and all agree that gold is tending to take the place of silver. In

1920 a goldsmith of Gujranwala, one of the more prosperous districts, told an official that he was selling the cultivator more gold in a day than he used to sell him silver in a month.

HOUSING

In the East, owing to the climate, housing is of much less importance than food or clothes. Yet of the three it is perhaps the best measure of a country's civilization. In nothing is the old rural civilisation of England more delightfully apparent than in the country cottage with its mixture of cleanliness, beauty and comfort; and in nothing is its urban civilisation of to-day more wanting than in the long endless rows of ugly dirty jerry-built tenements in the towns. It might almost be said, by their houses ye shall know them, for from a man's house radiates an influence which, good or bad, subtly affects his whole life. This is naturally much less true of Indian villages, where life is so largely spent out-of-doors that it might almost be said that a man's house is the sky above and the earth below. Still it is not an influence to be despised, and it may well become an incentive to effort, for, once a man becomes accustomed to a decent house, he will not willingly forego it; and to make it possible for his children to live in the same way, he will probably work harder than if he lived in a hovel.

At first sight there is not much change to note in the village house. The flat-roofed and mud-plastered building with its single storey is still the general rule, but here and there, especially round the towns, the two-storeyed red-brick house is beginning to be a feature of the landscape. In the old days the *pukka* house could no doubt be found, but it was usually rare enough to provoke enquiry as to the owner, and the almost invariable reply would be—the village money-lender. Now, as often as not, in the central Punjab it belongs to some cultivator who has made money in a canal colony or as an emigrant abroad. Owing to the growing popularity of this kind of house, brick-building, which 30 years ago was hardly know in the village, is fast becoming a village industry, and masons and carpenters are of all men the most difficult to procure. At the same time the old unfurnished low-roofed hovel with dark dungeon-like cells is slowly yielding to the well-timbered house with windowed rooms which are by no means bare. Almost everyone has a larger stock of metal utensils than before, and many boast a chair or two, a bit of crockery, a lamp and occasionally even a clock; while, if a member of the family has served in Persia or Irak, there may be a valuable rug as well. Another significant change is that, when the cultivator goes to town, he is not as content as he was with the low class '*tandur*,'[8] but has begun to put up at the hotel. Still less is he prepared to do any part of the journey on foot: he drives to the station in a tum-tum, and when he gets there, he may sometimes be seen getting into a second class carriage, *huqqa* and all. Many of these changes are due to the war which revealed to the Indian villager who served in France an entirely new standard of housing and comfort. He saw there with astonishment and envy how well the peasant proprietor can live, and returning to his village beheld its cattle-shed life with a tinge of disgust.

THE EFFECT UPON WOMEN.

The women are said to have gained more than the men from the rise in the standard of living. In the old days they had both to spin and to grind for the whole family, and in addition to cook, take the men-folk their meals in the field, sweep out house and byre, chop up the fodder and feed the cattle, as well as look after the children. Now the grinding is largely done by bullock, if not by engine, and what was woman's chief task falls indirectly upon the man. Gone, too, are the days when to buy your clothes was a mark of extravagance and pride, and as the machine-made cloth comes in the spinning wheel goes out. Moreover, with the growing refinement in dress, there is less inclination to perform the more menial tasks. Instead, more time is given to embroidery and weaving and, as some say, to gossip. These are only tendencies but they have been accentuated by the war, during which many soldiers' wives found it possible to live on their husbands' pay in comparative luxury and idleness. Women have certainly profited by the rise in the standard of living, but, as wants increase, men are beginning to be harassed by the little worries of life that come with the multiplication of possessions. "The nomad is free from troubles, for he lives in a thatched hut", says the Jangli proverb; and those who live in *pakka* houses and dress in fine linen, learn all too soon that there is a price to be paid for this as for everything else. Round the village the young may still be seen as merry as ever, playing some immemorial game or elementary new-fashioned cricket on bumpy ground, but their fathers give less time than they did to wrestling, *kabaddi* and the time-honoured fair; and even in the north, where on occasion men will still turn out in their thousands for tent-pegging, the art is not quite as popular as it was. On the whole, though, what is said above applies more to the central Punjab than to the rest of the province; and in the south, women are reported still to work harder than men, who love to sit over the *huqqa* for hours. The reason for this is that there is much more canal and well irrigation in the central districts than in the southern, and this means more continuous labour and a stronger habit of work.

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[8] Small baker's shop used as an inn.

DOES THE CULTIVATOR WORK HARDER THAN BEFORE?

In the central Punjab at least, the best judges agree that the cultivator works harder than before. On the one hand the dearness of labour makes him do things himself which in old days would have been left to labourer or menial: and on the other, the high prices that till recently prevailed spur him on to get all he can out of his land. The effect of this may be gathered from the following passage, which expresses the view of perhaps the best informed of those who have made enquiries for me on the subject. My informant is a landowner, a graduate and an official, and for some years has been working in the central Punjab. He speaks, therefore, with unusual knowledge and experience, but it must be remembered that what he says was written before the recent fall in prices.

"Many a kind of labour," he writes, "which was formerly left entirely to the village sweeper or menial and which was looked down upon is now often done by the cultivators themselves. It is a common sight to see their families doing the "*udai*"—separating the grain from the straw after it is thrashed—with the winnowing basket on their heads. A cultivator owning 50 canal-irrigated acres tells me that he saved 15 maunds of grain by getting his sons to do this work. In the old days the village sweeper or some other menial was always employed as fuelman for converting the juice of the sugarcane into sugar, but he is now being ousted by the cultivator's son, whose father has learnt to realise that a wage of 1½ sers a maund means a saving of two rupees for 12 hours' work. The cultivator mentioned above calculates that he and his family saved Rs. 130 in this way. The seasonal agricultural labourers who used to make a good deal during the spring harvest complain that they find each year duller than the last, because the cultivator has realised that a bushel a day in wages (he is generally paid in grain) means Rs. 4 a day or more.

High prices are an incentive to harder work and cultivation is now attracting greater care on the part of the cultivator. The sugarcane, which got only three weedings when *gur* fetched Rs. 5 a maund, gets five or six now that it sells at ten or eleven rupees a maund. The cultivator sees more clearly than ever that an additional yield of one maund per *kanal* means an extra Rs. 100 an acre. One more fact helps to bear out my point. The *Bisakhi* festival each year used to take two full days of the villager's time; this year (1922) it came at a very busy time, and only small children were allowed to attend the fairs."

This no doubt represents the spirit of the few rather than the habits of the many, and throughout this article it is important to remember that, when we speak of change, it is still confined to the minority. All change, however, begins with the few, and, if the causes that promote it continue, and if it is in harmony with the disposition and habits of the people, it will eventually leaven the whole. In this case it may be doubted whether either the causes will continue—prices have already fallen—or whether in a hot climate mere material gain is a sufficient incentive to harder work. "In this country," says Mr. Calvert, "people will accept a low standard of living with small exertions rather than strive after a higher standard by greater exertions," and he also notes a "tendency to reduce the area cultivated, if the same profits can be obtained from a smaller area."[9] Mr. Keatinge notes the same tendency at work in the Bombay Presidency. "It is a matter of general comment," he says, "that whole classes of cultivators who formerly used to do their own field work have now ceased to take any active part in field operations."[10] In both cases the tendency is evidently due to the high prices, which have made it possible for many to satisfy their modest requirements by living on the higher rents that high prices bring, instead of cultivating the land themselves, as they were obliged to do before in order to make both ends meet. From this point of view it is a bad sign that in the Punjab the area under tenancy is increasing, and that in the last decade the number of persons living on agricultural rents has increased from 626,000 to over a million. On the other hand in the Lyallpur colony, as we should expect from its vigorous peasantry, the precise contrary is the case: and even elsewhere, a large proportion of the tenants who are increasing their holdings are themselves owners, who see in big prices an opportunity to improve their position. To this type of man and to the tenant generally, high prices, as Mr. Calvert says, are "acting as a stimulus to greater exertion and greater interest."[11] It is much the same motive that has led to the recent remarkable increase in the number of masonry wells. In the first decade of the century their number actually declined, but in the next ten years they increased by 22,000. This fact reinforces the view that, in the central Punjab at least, more work is being done, as most of the great well districts are in that area, and every new well obviously means more work.

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[9] *The Wealth and Welfare of the Punjab*, pp. 47 and 96.

[10] *Agricultural Progress in Western India*, p. 146.

On the whole then, so far as the central Punjab and the canal colonies are concerned, there is every reason to believe that more work is being done; and from what we know of the sturdy north we may guess that the same is the case there as well: and, even in the backward south-west, it is significant that in Multan the number of wells has increased in 20 years by 42 per cent. At the same time there are indications throughout the province, outside the colonies, that for many small holders the higher standard of living rests less upon an increase in production than upon the inflated value of land which makes it easy to borrow. There is every reason to believe that, hand in hand with the rise in the standard of living, debt has seriously increased, and that the two are not improbably inter-connected. It is evident, therefore, that the whole question is one of great importance for the future, as with an increase in population and possibly falling prices no standard of living can be maintained for long without continual increase in production, and in this hard work is an essential factor. For, as Mr. Keatinge remarks, "if every economic advantage gained is to be the signal for relaxation of effort, if improved methods of farming are to serve not only to increase the crop, but also to swell the ranks of non-workers, is any marked progress possible?"[12] Clearly not. The old standard of work must at least be maintained: and if there is to be a permanent advance, there must also be knowledge and skill, and capital enough to apply them to the fullest advantage. In a word, if men who live in villages want a more civilised life, there must be agricultural progress. For the moment perhaps the matter is of less urgent importance for the Punjab than for the rest of India as there are still three million acres or more to be colonized. But when this area has been filled up, the question of how an increasing population and a higher standard of living are to be reconciled will have to be faced. If the cultivator is prepared to work both harder and more intelligently than before, no serious difficulty should arise. But if he continues opposed to progress, population must sooner or later increase faster than production, in which case one of two results will follow. Either there will be a struggle for the land that is not enough to go round, or the standard of living will decline. Russia, with its great upheaval following an immense increase of population, is probably an instance of the former, as the Ireland of a hundred years ago sinking back into poverty after the prosperity of the Napoleonic wars is a case of the latter.[11] It is as well, therefore, that the problem should be faced in time.

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[11] *Op. cit*, p. 119.

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[12] *Op. cit*, p. 148.

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[13] See Mr. George O'Brien's article in the *Manchester Guardian Commercial Supplement* on Ireland, dated 15th March 1923

MATERNITY AND INFANT WELFARE WORK IN INDIA AS COMPARED WITH ENGLAND.[1]

G. M. BROUGHTON, O. B. E., M. A., D. Sc.

The subject of infant mortality in India has recently aroused considerable interest. The all India Baby Week, inaugurated by Her Excellency the Countess of Reading, has brought into prominence one of the most urgent needs of this country. An examination of the figures relating to infantile mortality makes this abundantly evident. The latest figures that are available for the whole of India relate to 1921. In that year no less than 1,538,937 infants died before they were one year old. Or, in other words, on an average 197 infants out of every 1000 who were born died during their first year of infancy. The mortality was considerably higher than this in certain Provinces and in all the chief cities of India. In the United Provinces alone no less than 369,131 infants died,[2] while the death-rate in the Central Provinces was 279.5 per 1,000 registered births, and in Bengal it was 206.1. In the cities an even more serious state of affairs is revealed. Out of 1,000 registered births, the average infantile death rate in Bombay was 667 ; in Cawnpore it was 580 ; in Sholapur 396 ; in Nagpur 358 ; in Calcutta 330 ; while Poona city has the unenviable position of heading the list with a mortality rate of 876. In none of the remaining cities cited is the rate less than 200.

These figures which have been taken from the latest Annual Report[3] of the Public Health Commissioner speak for themselves. "They indicate," to use the words of that Report, "in the strongest possible measure the dire necessity of very urgent attention being given by Municipal Councillors to the improvement of the conditions under which people have to live in the cities of India." The whole burden cannot, however, be laid on the Municipalities. It is, as Lady Reading pointed out in her speech at the opening of the Delhi Exhibition, a national problem and a blot not only on India but on civilization generally.

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[1] This article is also being published in the Lady Club Journal (June issue).

[2] See also Article by Director of Public Health, United Provinces entitled "The economic value of the prevention of desease," *Indian Journal of Economics*, January 1924.

[3] *Annual Report of the Public Health Commissioner with the Government of India for 1921*, p. 69.

The National Baby Week, which has just been celebrated throughout India, may well become the starting point of a great national movement which should have as its object the diminution of this appalling death rate. Those who love their country and wish to see it progress can scarce do better than join in this compaign. The success that attended the Baby Week Exhibitions held during the past two months is a sign that India is awakening to the serious aspects of this problem and that the time is ripe for putting this movement on a permanent basis. Some places are already making arrangements with this end in view. In Delhi, where the Baby Week was extraordinarily successful and where over 21,000 persons attended the Exhibition, a sum amounting to Rs. 10,319 was collected ; a permanent committee has been established whose duty it will be to see that the extensive propaganda work that was so ably undertaken by the Social Service League in connection with the Delhi Exhibition, does not cease. The Committee will also make arrangement for the next annual exhibition and will help, out of the surplus funds of the past exhibition, the existing Infant Welfare Centres. It is also proposed to open a new welfare centre. Other centres are no doubt making similar arrangements.

In addition to these local efforts, there are in existence certain funds which help either directly or indirectly in the efforts to lower the mortality among infants and children. The earliest of these, founded in 1885, is known as the Lady Dufferin Fund, the principal object of which is to provide female medical aid for women and children. The Victo ria Memorial

Scholarship Fund is utilised in the training of midwives. The Lady Chelmsford Fund has for its primary object maternity and child welfare work. The Lady Reading Women of India Fund has been established for the provision of a hospital for Indian women in Simla and to aid in the training of Indian women who wish to become nurses. These funds are all under one management and so overlapping is prevented. In addition, the National Indian Red Cross regards child welfare work as one of its primary functions and most of its branches have opened Infant Welfare Centers. Considerable financial assistance was given by the Red Cross to the different exhibitions held throughout the country during Baby Week. The total resources represented by these various Funds are however sadly inadequate to cope with the appallingly high death rate of mothers and infants in India. Much greater pecuniary assistance is needed. There is, if success is to be attained, great need also of arousing interest among Social agencies and all public-spirited Indian men and women in order that they may join in the necessary propaganda work and help by all means at their disposal.

Before describing in detail the measures that have hitherto been taken to combat this high infantile death rate in India, it may be of some little use to give an account of some of the measures that have succeeded in helping to lower very considerably the infantile death rate in England. At the beginning of this century, England found herself confronted with a problem very similar to that which India has to set herself to solve at the present day. At that date the infantile death rate in England was more than 150 per 1,000 registered births. Since that date it has steadily declined and in 1921 it has reached the low level of 83, while it is estimated that the figure for 1922 is 77.[4] There has also been a corresponding decrease during the same period in the average annual death rate per 1,000 living from 18.2 to 13.8 in 1919.[5] The improvement has, that is to say, taken place in all ages and not only among infants. The two problems are in fact closely interlinked. Where insanitary conditions are allowed to prevail, not only does one find a high death rate among infants, but even adults also fall victims to such conditions.

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[4] *Fourth Annual Report of the Ministry of Health in England*, 1922-23, page 11.

[5] *First Annual Report of the Ministry of Health in England*, 1919-1920, page 43.

The importance of safe-guarding the health of the community and of co-ordinating all efforts in this direction was only gradually recognised in England. An interesting account of this movement and a comparison with conditions in India in this respect may be found in the latest Annual Report of the Public Health Commissioner.[6] The establishment of the Ministry of Health in England in 1919 has finally made it possible to bring about effective central control. Much needs to be done in India if results similar to those that have been achieved in England are to be brought about. In this connection the need of a Public Health Act for India, of organised propaganda work undertaken by Governmental and voluntary agencies and the utilisation of the resources of the National Red Cross Society are all emphasized by the Public Health Commissioner.[7]

Reverting to the problem of infantile mortality in England, one finds that when enquiries were first made into the causes of a high infantile death rate, the assumption was generally made that the industrial employment of women was one of the chief contributory causes. In a paper published by the Royal Statistical Society, Miss Clara Collet showed clearly that there was little statistical evidence to justify such an assumption.[8] While admitting that the employment of married women with young children is an evil, she pointed out that "there was nothing so likely to weaken the power and relax the efforts of a Sanitary Committee which believes itself entitled to attribute high death rates to the moral habits of the community, quite apart from such factors as over-crowding and bad sanitary conditions."

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[6] *Annual Report of the Public Health Commissioner with the Government of India for 1921*, pp. 61-65.

[7] *Annual Report of the Public Health Commissioner with the Government of India for 1921*, page 64.

[8] "Extent and effect of the Industrial employment of women," by Clara Collet, M A, *Journal of the Royal Statistical Society*, June 1898.

No thorough enquiry appears yet to have been made into the effects of the industrial employment of women on the question of child birth. A very interesting account entitled "The pregnant woman in industry"[9] appeared in the Journal of Industrial Hygiene. The two reports made by two members of the Women's Medical Science in India into somewhat similar problems in Bombay[10] and Calcutta[11] threw some light on the matter. But whatever the effects of such employment may be found to be, there can be no doubt of the importance of the moral habits of the community in relation to infantile death rate. In England it is found, for instance, that "the infant mortality rate of illegitimate children is consistently double the rate for legitimate children."[12]

At the same time the serious consequences of a high infantile death rate are emphasized by the Chief Medical Officer, who points out, in his report, that a high rate means not only the loss of many infants but also "the maiming of many surviving children for conditions which kill some injure others; a high death rate in the next four years of child life and the existence of unhealthy conditions in the mothers and in the home-life of the people."[13] Closely related to this is the mortality among women in child-birth and this, we are told, still remains high in England and has shown little or no improvement since 1894.

We may then now enquire what is being done in England to lessen the mortality among mothers and infants. "The fall in infant mortality is not attributed to any one factor, but to general enlightenment and to the co-ordination of ameliorative agencies on behalf of the mother.[14] The Maternity and Child Welfare Act of 1918 empowered local authorities to make arrangements, subject to the approval of the Ministry of Health, for attending to the health of expectant and nursing mothers and of children under the age of five years. The basis of each scheme consists in the provision of competent midwives and health visitors and the establishment of maternity and infant welfare centres. Sooner or later a maternity home is also established. In England, the infant welfare centre is regarded as " almost the backbone of the whole social campaign against infant mortality." The increase in the number of centres from 250 in 1914 to 1,960 in 1921 and the corresponding decrease from a mortality rate of 105 to 80 may well be taken as an indication of the success of those centres. In them the mother is given needful advice both as regards her own health before and after the birth of the child and also as regards the health of the child. No less than 14 per cent. of the total expenditure incurred in connection with maternity and infant welfare work is spent on infant welfare centres. The need of suitable food is also not overlooked and 17 per cent. of the total expenditure is incurred for its provision. Not all parents visit infant welfare centres, and so in order to carry the work into the homes of the parents over 3,000 health visitors are employed and 31 per cent. of the total expenditure is spent on their salaries. Maternity homes and infant hospitals account for another 14 per cent. Medical treatment and the fees of midwives, etc. account for another ten per cent. The actual amount spent on each of these objects may be calculated from the fact that the Ministry of health in 1920 gave grants amounting to £ 873,850 to local authorities and voluntary bodies and that these grants represent only 50 per cent. of the total expenditure incurred by those receiving them.[15] A recent Resolution passed by the Government in England has removed restrictions on these grants so there is likely to be an even greater development in the future.

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[9] *Journal of Industrial Hygiene*, June 1921.

[10] "Maternity Benefits for Industrial Workers," by Dr. Barnes, *Bombay Labour Gazette*, September 1922.

[11] "Women's Labour in Bengal Industries," by Dr. D. F. Curjel *Bulletin of Indian Industries and Labour*.

[12] *First Annual Report of the Ministry of Health for 1919-1920*. page 53.

[13] *Annual Report of the Chief Medical Officer of Health of the Ministry of Health in England for 1920*, page 13.

[14] Op. cit. page 21.

[15] *Second Annual Report of the Ministry of Health*, 1920-21, pages 21-22.

While doing so much to lower the infantile death rate, the subject of maternal mortality, which is closely connected therewith, is not overlooked. Indeed the whole subject of maternal mortality as well as infantile mortality is now being treated in England as an urgent and serious problem. One central authority, namely, the Ministry of Health, acts as a co-ordinating authority for England. In the report issued by that department, local authorities are reminded that "the State cannot afford to be careless and negligent of motherhood; it cannot afford to leave its infant life to chance or the misfortune of circumstances."[16] They are further reminded that "the physical care of maternity, infancy and childhood, is now for the first time supervised by one Department of the State and the result should be a single unified and continuous supervision from birth upwards."

The success that has attended the efforts in England to reduce infantile mortality may be pleaded as an excuse for the somewhat lengthy account given above. The known facts regarding the death-rate in this country make it imperative that the same determined effort should be made in India and that funds should at once be set aside to a much greater extent than before if similar results are to be achieved. Many of the causes of death in India are similar to those in England. In Bombay, for instance, we are told[17] that 68 per cent. (7,422) of the total deaths were due to diseases of the respiratory system, congenital debility and premature birth; that diarrhœa and entritis caused 683 deaths and malaria, ague and remittent fever 306. Again, as in England, the death rate among the poor is much higher than among those who are better off. In this connection two very interesting tables are given in the Report of the Municipal Commissioner for Bombay for the year 1920-21. In those tables, the infantile death rates among Hindus of low caste is given as 622 per thousand, while among Parsees, the majority of whom are well off, the rate is 198. Among Jews the rate is 256 and among Europeans 311. But a surer index of poverty is the number of rooms occupied by the family. In the same report 86 per cent. of the deaths are found to have occurred among families who occupied one room or part of a room, and out of a total of 19,731 births recorded no less than 14,956 are said to have taken place under these conditions. The extreme poverty prevalent in Bombay and the very great shortage of housing accommodation there receives striking testimony. As in England so also in India the heaviest infantile mortality is during the first week of life. On an average for the whole of India of 100 infants who fail to survive the first year, no less than 43 die in the first week. The deaths also in the five months from the beginning of the second to the end of the sixth are 60 per cent. more than in the last six months of the year. The high rate of mortality among children from 1 to 5 years found to be a feature where the infant rate is high is also borne out by the Bombay figures. [18] The percentage of those who died in that group to the total mortality in the year is considerably higher than in the subsequent age group till between 20 and 40 when the percentage again rises.

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[16] Op. cit., page 34.

[17] *Report of the Public Health Commissioner for* 1920, page 57.

As has already been stated, no direct facts are available with regard to maternal mortality but the figures available for Bombay show that among women the age period from 20 to 30 yields the highest death rate and there can be little doubt that this high death rate is to some extent due to maternal mortality. The lurid description of midwifery practice in India to be found in the Report of the Public Health Commissioner for 1920 (page 60) serves as a further proof. In that Report we are told that the vast majority of women in India are attended in their confinement by indigenous midwives, known as *dhais* and that their midwifery practice follows custom and tradition and is not based on real training and knowledge. Such women are of the lowest caste and of uncleanly habits. "Clothed in voluminous dirty garments their arms are decorated with innumerable glass bangles; their fingers covered with shoddy rings, end in dirty finger nails. Their apparatus consists chiefly of a large tobacco pipe of the hookah variety, a dirty old knife and a small oil lamp, the oil of which serves indiscriminately both for burning and oiling the hands for vaginal examination. A few scraps of rag or old wool pulled out of a mattress and some string completes the outfit."

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[18] *Report of the Municipal Commissioner for Bombay, 1920,* page 4.

In order to combat this dreadful state of affairs, a Fund was established in 1904 by Lady Curzon. The income of this fund, called the Victoria Memorial Scholarship Fund, is approximately £ 2,000 a year. But writing of this fund, Dr. Balfour points out that "a small charitable association with insufficient funds cannot carry out the gigantic task of reorganising the midwifery practice of a country like India." [19] In this connection Dr. Balfour emphasizes the need of utilising the services of medical women in the newly reformed Public Health Department of the Government of India. She further points out that the annual grants at present received from the Central Government amount to £25,000 to carry on a Women's Medical Service and £14,000 to support a medical college for women at Delhi. When it is realised that approximately half of the total population of India (300,000,000) are women and girls to whom, on the whole, the idea of utilizing the services of medical men is repugnant, there is evidently great need for far greater financial support than has hitherto been given to forward these objects.

Undoubtedly something has been done by Provincial Governments. Some account of their efforts in this direction has been given in the Report of the Public Health Commissioner, but even these efforts fall short of supplying the need for proper treatment and care at the time of child birth. It would be well if Provincial Governments were to stimulate local efforts by giving grants equal to half the total expenditure as is done in England. It would then be possible to co-ordinate all these efforts and to establish certain standards for midwifery practice and procedure. Pecuniary help is undoubtedly the best means of propaganda.

The Lady Chelmsford All-India League for Maternity and Child Welfare is yet another central "charitable" association.

[19] *The Lancet*, June 10, 1922, page 1162.

It was founded in 1920 and started with a fund of eight lakhs. The objects of this association are briefly (1) the training of health visitors and maternity supervisors, (2) the formation and establishment of branches of the League in various parts of India and propaganda work. The need for such an organisation is clearly evident from all that has already been stated, but the obvious insufficiency of the funds to cope with so great a need is also apparent. Voluntary effort is invaluable in starting all such schemes, but the necessity of giving substantial pecuniary help to such efforts is all the more necessary in a country like India where the infantile rate is high and where poverty is a general feature.

Before closing, it may not be out of place to refer to the question of maternity benefit for industrial workers. Mention has already been made of the problems arising from the industrial employment of women. There can be little doubt that considerable relief would be experienced by such women if they could be sure of obtaining help at the time of child-birth. Some enlightened employers have already started excellent maternity benefit schemes. An account of such activities may be found in a book recently published[20] but as employers who intend starting such schemes are naturally interested in the financial cost, permission has been obtained to publish certain data collected from firms where such schemes have been in operation for more than a year. The experience of such firms has been that if maternity benefit is only given to women who have completed 11 months' service with the firm approximately 10 % will qualify annually. If the women are given Rs. 20 as a maternity benefit, then the total expenditure incurred for that purpose will be Rs. 2 per woman employee. As, however, the woman's need at such a time is not merely a pecuniary one, the firm should employ a woman doctor either part time or whole-time according to the numbers employed. Besides being responsible for administering the maternity fund and issuing the necessary certificates to those who are eligible, the woman doctor may well be made responsible for supervising the general

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20 *Labour in Indian Industries*, by G. M. Broughton, Oxford University Press.

health of the women and children and attending to their accidents. In addition to the services of a woman doctor, the services of one or two midwives will be required. If the salary of the doctor is Rs. 300 a month and that of the midwife Rs. 40 an additional Rs. 4,080 will be required.

It is satisfactory to note that in India where the employment of women before or after child-birth is not prohibited, there are employers who are sufficiently alive to the importance of the subject to induce their workers to cease work for a period of two months at that period by giving them monetary aid and medical assistance. The day may yet come when legislation will compel other employers to follow the example of these men who have been voluntarily giving women help at a time when they most need it.

PUBLIC FINANCE AND DEVELOPMENT

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In recent years there has been a marked demand in India for state assistance towards industrial development, and the form of assistance which is in most demand appears to be financial assistance either in the way of grants or of loans. In many provinces the Governments have been engaged in framing legislation for the purpose of securing assistance from public funds for industrial development. In the United Provinces a Board of Commissioners has been constituted for the consideration of applications for state aid from industries. In Madras two years ago the State Aid for Industries Act was passed for the purpose of enabling the Government to give assistance to new and nascent industries. A proposal for similar legislation is now under the consideration of the Burma Legislative Council. All the measures are in line with the recommendations of the Indian Industrial Commission and must necessarily therefore carry weight with the Government.

An objection which has been frequently raised in every province where a measure for state assistance has been under consideration is that financial assistance for industries in the shape of loans ought to be given by the state not directly but through the medium of an industrial bank. There is much weight in this objection since governments cannot be trusted to deal with industrial loans with the knowledge and judgment possessed by a bank, and since Development is a transferred subject under the reformed system of government, there is also the danger that in the distribution of Government loans, political influence may make itself felt. But the question of forming industrial banks in India is a difficult question. What little banking there is in India is so much under the influence of the banking tradition in England which looks to commercial finance as the most suitable field for banking operations that an advance in the direction of industrial banking must necessarily take time. Moreover, investment as a habit being still relatively so undeveloped in India, the customary forms of investment in land and in loans to local clients will continue to have superior claims on investors unless a large forward policy is undertaken by the State and the claims of industrial investments are established by experience and demonstration.

In the meantime it is interesting to observe that since the introduction of the Reforms, loans have begun to fill a much more conspicuous place in the budgets of Provincial Governments. This is an important development because if the State is to undertake a policy of financial assistance for industries, it can do so only by entering the market to pledge its credit and raise by way of loans the funds necessary for carrying out such a policy. The traditional policy of public finance in India has been to rely too much on surpluses of current revenue for the financing of capital undertakings. Indian politicians of a generation ago, notably the late Mr. Gokhale, were never tired of pressing on the Government of India the desirability of utilising its undoubtedly large credit for raising the finance necessary for capital undertakings. The Government however, has been largely under the influence of the primitive idea of public finance which regarded borrowing in every form as dulling the edge of husbandry.

Two circumstances may be mentioned as causes of the changed attitude of the Government in this matter. The first is the war which in this as in other things has proved a wonderful schoolmaster. The enormous demands which the war made upon the Government for public expenditure in a variety of forms compelled them in spite of themselves to utilise the credit at their command, and the hesitancy which previously marked their policy in regard to loans has necessarily disappeared. Moreover, the enormous extent to which Governments in Western countries financed themselves, in some countries less prudently of course than in others, during and since the war by means of loans has not been without its effect in India.

Another circumstance which has helped in the same direction is the power which has been given to the provincial governments under the Devolution Rules in the reformed system of Government to raise loans independently of the Government of India under specified conditions. This power has not been utilised to any considerable extent by provincial governments hitherto. They have been content to raise their loans as before through the Government of India on the perfectly legitimate ground that in the present condition of monetary stringency in the Indian market it would be unwise for several governments at the same time to bid for loans in the market. The Indian money market is a limited market and for all practical purposes it exists as a single market. Future developments may make it possible for some at any rate of the provincial governments to develop their own constituencies, but that time is not yet. One sure method of developing provincial money markets would be for the provincial governments to put to actual use the powers of independent borrowing granted to them under the new constitution. Local confidence and patriotism in money matters may be roused in this way, and smaller money markets may develop side by side with a general all-India market.

The dangers of financing governmental expenditure by means of loans are well understood. The main danger of course is that of extravagance in expenditure. But that danger need not be seriously considered in the democratic system of finance which is rapidly establishing itself in the provinces. The new democracy of India is parsimonious to a degree and they may be trusted to exercise to the fullest extent the effective control over finance which is possessed by the local legislative councils both directly and through the Public Accounts and Finance Committees. A second danger which is sometimes apprehended is that a large policy of government loans may raise the general rate of interest for private industrialists throughout the country. There is truth in this objection, especially in a country like India which is at the beginning of its industrial development and where the class of investors who invest in other than the traditional modes of investment is so limited. This however, is a transitional danger. As investment proceeds, it will be found that the market for private industrial loans will differentiate itself more and more sharply from that for Government loans; and except in the sense that markets in allied forms of business tend to impinge upon one another, the direct pressure of state loans upon the market for industrial securities may be regarded as practically negligible.

The increasing position taken by loans in provincial finance may be illustrated by figures with regard to the capital account in the Madras budget since 1922-23. The total amount borrowed during the year 1922-23 by the Madras Government was 66.18 lakhs. In 1923-24, according to the Revised Estimate for the year, the figure rose to 67.07 lakhs; and in the Budget Estimate for 1924-25 the total borrowing for which provision has been made is 110 lakhs.

The loans of the Provincial Government are classified in the Madras budget under three heads (1) productive loans *i. e.*, 'loans that pay their way like the share capital of a business' (2) posterity loans *i. e.*, 'loans expended on works of permanent public improvement with the intention of paying over a series of years' and (3) deadweight debt or 'money borrowed to keep the pot boiling' *i. e.*, against which there is no material asset. Of these three classes of loans, the first includes loans for irrigation works, housing schemes and Government commercial concerns from all of which a sufficient return is expected sooner or later to pay off principal and interest. It also includes what is known as the provincial loan account, that is, all moneys which have been lent by the Provincial Government out of its borrowings to local bodies and municipalities. To the extent that local bodies are ultimately responsible to the Government for repayment of principal and payment of interest, these are also regarded as productive loans. To the second class belong all loans expended on objects from which a direct monetary return cannot in the nature of things be expected, *e. g.* public buildings, bridges, etc. but against which the Government holds substantial material assets. The third class, namely deadweight loans are those which have been contracted for meeting the current expenditure of the Government and which neither give a direct return nor are represented by material assets.

A question of some importance in regard to this classification of loans is whether the Government is justified in the claim that only loans raised for meeting the current expenses of the year ought to be regarded as deadweight, *i. e.* unsecured debt and that all other loans may be regarded as properly covered. The practical importance of the question is this : from a strictly business point of view, a government is justified in raising loans to any extent so long as the loans do not result in the creation of 'deadweight debt'. If the term 'deadweight debts' is interpreted too narrowly, it will mean of course so such more latitude to the Government for borrowing. A government which is inclined to be extravagant and which at the same time is afraid of raising new taxes may raise a loan for purposes which ought really to be met from current revenues and yet keep the loan out of the category of deadweight debt by adopting too narrow a definition of the term.

Referring to the classification set forth above, we shall find that there are a few items which deserve scrutiny from this point of view. Take for example, the question of Government commercial concerns. All loans expended on these are regarded as productive debts. Is this claim tenable ? Government industries are 'pioneer' industries, that is, they are admittedly experimental ventures ; if they have ceased to be experimental, they must either be abandoned or be sold. It is doubtful if the assets of an industrial concern, admittedly experimental in character. can be regarded as proper cover for a loan. The object of a 'pioneer' industry is primarily educational, and only secondarily commercial, and like all educational expenditure its expenses ought to be met from current revenues.

Another doubtful item is the expenditure on public buildings which are regarded in the foregoing classification as not falling within the category of deadweight debt. The question is, can it be said with regard to many public buildings that they have a market value? Except in the capital city of the province and in large industrial centres, it may safely be asserted that there is no such thing as a market for public buildings except regarded as a collection of materials. The market value where it exists would be so far below cost as to be negligible. A market may of course be postulated for small public buildings, but then the difficulty is that these small buildings cannot be expected to last long enough and therefore are not proper cover for public loans.

Lastly, a word about budget procedure. One of the most important questions which the Government will have to consider hereafter, if an active policy of economic development is accepted by them, is the adoption of a suitable budgetary system for developmental finance as distinct from ordinary administrative finance. The budgetary system of British India under which all allotments automatically lapse at the end of the year is obviously unsuitable for a policy of continuous development. The objections raised by the Acworth Committee on Railways against the system under which railway grants lapsed into the general budget at the end of the year apply equally to the finance of every state undertaking of a developmental character. No private business can ever be run on a system of finance which rules out systematic forecasting and planning ahead over a period of years; much less can a state business which suffers from additional difficulties characteristic of state enterprise in every country.

A step in this direction which has been taken recently in several provinces is the introduction of commercial accounting for every business enterprise undertaken by the Government. This is a step of very great importance. In the first place, no government 'pioneer' enterprise can make any appeal to business people which does not show a possibility of success on the system of accounting recognised in business circles. Hitherto there has been far too much assertion by Government experts and too little demonstration by facts stated in a form capable of verification by recognised canons of business success.

In the second place, a system of separate *accounts* may pave the way for a system of separate *finance*. What is required is that the funds allotted for developmental undertakings ought to be separated from the general administrative budget and thus saved from the necessity for annual legislative sanctions. Our budgetary system in India is modelled upon the British system, but we seem to have accepted that system without certain necessary qualifications which have been accepted in the United Kingdom. It is necessary to attempt in India something like the distinction which is observed in Great Britain between Supply Service charges and the Consolidated Fund. Monies can be voted out of the latter by a standing statutory sanction whereas all grants on account of the former require a vote of the House of Commons in Committee of supply. It is relevant to our purpose to note that when the Development Commission was set up in England, the grants on their account were borne on the Consolidated Fund and did not require the annual sanction of the legislature.

The principle is one of far-reaching importance. It applies not only to business undertakings such as Government commercial concerns, railways, forest exploitation schemes, etc., but also to undertakings such as Universities. New universities are being rapidly brought into existence in India with enlarged responsibilities and functions, and for the resources required for fulfilling these responsibilities they are dependent at the present stage almost entirely on government grants. No university under these conditions can possibly function unless the grants required for their development are secured to them by a system of standing sanctions irrespective of the caprices of the legislature. The situation in some provinces is that for the resources required for the existence and development of universities they have been thrown not merely upon the unsatisfactory expedient of annual legislative allotment, but upon the still more unsatisfactory and precarious source of supplementary grants. The system will not work. It is bound to result in disaster and chaos unless a determined effort is made, as far as developmental undertakings are concerned, to shake off this bad old tradition of Governmental finance in India. It is a tradition which worked perhaps tolerably in the days when a continuous bureaucracy was in power but it must necessarily break down in the whirlpool of democratic politics.

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DISTRIBUTION AMONG THE FACTORS OF PRODUCTION

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In an article in the October issue of the *Indian Journal of Economics* the writer pointed out the confusion which has arisen from the failure to distinguish clearly between the distribution of the proceeds of industry among the various elements engaged in production (or the factors of production) and the distribution of income among the people within a country. We found that the ordinary classification of the factors of production as land, capital, labour and organization had been made from the latter point of view, and that it was inadequate from the former point of view. From the point of view of *factoral distribution* classification could best be done by beginning with the disutilities incurred in production, or with *real costs of production*, namely: (1) alternative uses of goods destroyed in the process of making the good under consideration; (2) personal exertion of body or mind, or other products which might have been forthcoming from an alternative exertion; (3) alternative products which might have been forthcoming from a different use of instrument goods, or durable production goods, such as land, buildings and machinery; (4) postponed or deferred consumption, or an alternative time of consumption, (5) risk of loss or uncertainties; and (6) efforts of society to provide conditions under which production will be carried on, and the attitude of society toward those who are carrying it on. The corresponding factors of production are the goods which furnish these services in production, which are: (1) raw materials and non-durable producers' goods, or their unspecialized form as working capital; (2) personal effort, both physical and mental, or labour; (3) durable production goods such as land, buildings, machinery and equipment; (4) waiting, or deferred consumption; (5) uncertainty bearing; and (6) societal aid, protection and goodwill.

The corresponding costs of production, from the point of view of the entrepreneur, or the distributive share, from the point of view of the economist, as are follows: (1) purchase price of raw materials and non-durable producers' goods, such as fuel; (2) wages, salaries, earnings of management and management-interest; (3) rents or instrument-hires (depreciation included); (4) time-discount, or true interest (sometimes called "net interest"); (5) risk-interest, risk-profit and insurance premiums; (6) taxes and contributions, and payments for advertising and good will. To these must be added as a distributive share (7) pure profits, or the residuum above cost accruing to the entrepreneur.[1]

In the January issue of the *Indian Journal of Economics* the writer discussed "Diminishing and Increasing Returns" as a necessary preliminary to a discussion of the principles governing the distribution of the value-proceeds of industry among the factors of production. It is the purpose of the present article to discuss these principles underlying *factoral distribution,* first by discussing the special influence bearing upon each of these distributive shares, and then by making such generalizations as we can concerning the division of the value-proceeds into the distributive shares. Inasmuch as the distributive shares are costs and the problem of distribution is the problem of value, consideration of the peculiar and special influences relating to any of the distributive shares is a consideration of just such special influences as affect the supply and demand for that factor of production. Our discussion of the various distributive shares, will, therefore, be largely a study of these peculiar and special influences, and of the distinctive characteristics of each of the factors of production allied thereto.

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[1] Perhaps this is a good opportunity to correct an error of statement made in this article. The paragraph beginning on the bottom line of page 22 (*Indian Journal of Economics*, Vol. IV, Part I) should read as follows:

First. While these categories may be considered to be all-inclusive of the social income they do not exhaust the whole of the value-proceeds of an industry, for there are necessary outlays which do not fit into these categories. Taxes, franchise payments, royalties, advertising expenses, insurance premiums —are these payments for the use of land, capital, labour or organization? For while these are outlays which may eventually (after going through the medium of other business or social organizations, such as a corporation or the state) reach individuals in the form of wages, rent, interest or profits, yet they can hardly be said to be incurred for the use of land, capital, labour or organization.

I

The Distributive Share Allotted to Raw Materials and Non-durable Producers' Goods

The remuneration for the use of raw materials and non-durable producers' goods[2], or their purchase price, appears at first thought to be subject to the same conditions of supply and demand as consumers' goods. To a certain extent this is true; but there is one important difference. The utility method of calculation is only remotely connected with the immediate demand for raw materials and non-durable producers' goods. The goods are wanted, not because of the desiredness of the goods themselves, but for resale at a profit, after increasing, in some form or another, their utility.[3] The demand for goods to be manufactured or stored and then sold to others is usually called "derived demand," and Marshall, along with other economists, recognizes that the law of primary demand, or the principle of the comparison of marginal utilities, here fails in reaching the essential nature of the price-fixing process. The business man uses, not a utility, but a pecuniary mode of calculation. Or perhaps one might say that the only utility that interests the business man is the profit utility. The pecuniary mode of calculation is the result of the fact that business is conducted for profit, or for the purpose of obtaining additional control over the media of exchange, or general purchasing power.[4]

[2] The term "non-durable producers' goods" is used here to designate those goods which do not themselves go into the finished product, but which are used up in the process of production, as, for example, fuel and lubricating oil.

[3] This making more desirable, or addition of more utility, may be done (1) by the process of manufacture, or change of form (that is, by changing the shape or form, or chemical composition, or by combining the goods with other goods), (2) by transportation, or change of place, (3) by storage, or change of time of use, and (4) by trade, that is, by arranging for change of possession.

[4] While the general utility mode of calculation is valid for both a barter and a money economy, the pecuniary mode of calculation is valid only for a money economy.

When business is conducted for profit, maximum price offers depend upon the expectation of profit. They are thus limited, for any particular good, by the difference between what has to be paid for other necessary productive agents and the price that may be realized from the new product. Or, as Marshall states the law of derived demand : " The price that will be offered for anything used in producing a commodity, is, for each separate amount of the commodity, limited by the excess of the price at which that amount of the commodity can find purchasers, over the sum of the prices at which the corresponding supplies of other things needed for making it will be forthcoming. To use technical terms, the demand schedule for any factor of production of a commodity can be derived from that for the commodity by subtracting from the demand price of each separate amount of the commodity the sum of the supply prices for corresponding amounts of the factors."[5]

When we turn to the supply or reservation price of raw materials and non-durable producers' goods, we are faced with the entire problem of costs and factoral distribution which we are investigating—for these raw materials and non-durable producers' goods are offered in the market by other firms, entrepreneurs and business men whose reservation or supply prices are fixed by the costs of production. Between the limits of *maximum demand offer*, as fixed in accordance with the law of derived demand, or as determined by the net additional product, and the *reservation price*, as fixed in accordance with the cost of production, will the price of raw materials and non-durable production goods be established.

It is the fact that these payments are made to other business firms, and therefore, in a sense, again subject to distribution among factors of production that has led economists to omit all reference thereto in discussing the theory of distribution. In discussion of the theory of personal distribution of income this is justifiable, but hardly in the present problem of factoral distribution.

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[5] Marshall, *Principles of Economics*, 6th. ed., p. 383.

II

The Payments for Personal Efforts

Economists are quite generally agreed in using the term "wages" in the larger sense, to include all payments for personal labour. This includes wages, in the narrower sense, salaries, fees, earnings of management and management-interest. Of these, wages and salaries and fees are called such in the business world. Earnings of management may be included in the business man's "profits," in dividends to shareholders to a slight extent, or in agent's commissions. Management-interest is included in certain market rates of interest, such as that for call loans, where those who furnish funds have to spend considerable effort and time in order to keep those funds invested continuously and safely.[6]

In a general way the remuneration for labour of all sorts is determined in the same way as that for producers' goods of one sort or another. That is, the maximum price offer of an employer will be the amount which the particular labourer would, if employed, add to the value of his product. It is on the supply side that labour presents certain peculiar features, features which it does not share, or shares only to a partial extent, with other sorts of factors of production. These peculiar features are: (1) that labour is inseparable from the presence of a person who is not only a furnisher of labour, but also a consumer; (2) that labour cannot be stored or held for future use, as can nearly all kinds of producers' goods; (3) the supply of labour (in the sense of the number of labourers) is not furnished in accordance with the costs of production mode of calculation, but rather in accordance with social conditions and biologic laws;[7] (4) the final alternative to being utilized in production is not, as in the case of other producers' goods, to be allowed to waste and be thrown away, but is rather a withdrawal from the economic life through the competition of other phases of life, such as the desire for leisure. Labour is withdrawn from the labour market long before the remuneration for that labour has reached the zero point. Certain other factors of production, such as agricultural and building land, are not so withdrawn, but are likely to be used even if there is no payment therefor.

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[6] Such rates are normally somewhat higher than rates for long-time loans to which the investor has to give little time and thought.

[7] This condition creates a considerable chance of a lack of equilibrium between supply and demand, especially in view of the cyclical and seasonal variations in the demand.

There are several other influences upon the supply of labour which it would be outside the scope of this article to discuss here; such as the structure of the population (proportion of male population of working age to the total population), customary and hereditary occupations, the efficiency of labour, the influence of labour organizations, an accepted standard of living, the mobility of labour and its dependance upon social customs.

III

Payments for the Use of Durable Production Goods—Rent

a. *The Nature of Rent and of Instrument-Goods*

The term "rent" is one of the most abused of economic terms. It is variously defined as (1) the return due to, or paid for, (quite different things) the services of land in the common meaning of the word "land"[8], (2) the return due to, or paid for, the permanent, indestructible qualities of the land,[9] (3) that due to, or paid for, all natural resources,[10] (4) that due to, or paid for, differential advantages of all factors of production,[11] and (5) that due to, or paid for, the use of all durable production goods.[12]

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[8] "The land is the principal of the natural agents which are capable of being appropriated, and the consideration paid for its use is called rent." John Stuart Mill, *Principles of Political Economy*, Book VI, chap. XVI, para. 1.

[9] "Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil." Ricardo.

[10] "The income derived from the ownership of land and other free gifts of nature is commonly called rent." Marshall, *Economics of Industry*, p. 69.

"The payment or reward of Land . . . is called Rent." "Land . . . we defined as meaning all nature-Power of every kind whatsoever." L. le Mesurier, *Commonsense Economics*, p. 54 and 22.

"An income arising from the productive employment of any natural agent such as land, mines, water-power, etc." Penson, *Economics of Everyday Life*," Part I, p. 140-1.

It is this last definition which we believe to be the true one, that is, which has most significance for the theory of distribution. It is also that used in the business and commercial world. Rent is then the payment for the use of a durable good for a period of time, the good to be restored to the owner at the end of the period. It is contrasted with purchase-price, which is the payment for the use of a good for its entire life. Non-durable goods have a purchase-price, but they cannot be rented, for the essence of rent is that the good be used for a period of time, and then returned. Durability is thus the distinguishing feature of goods, the payment for which takes the form of rent.

In general there are three classes of production goods which are most or less durable, and which are likely to be paid for in terms of use for a period of time—that is, in rent. These are (1) land, (2) buildings, and (3) various sorts of machinery and equipment.[13] A great deal of clarity in discussing rents would ensue if we were to adopt the terms land-rent (or ground-rent), building-rent, and equipment-rent when discussing these sorts of rent separately. In practice, of course, these are sometimes combined, as for instance, in the rent of a furnished shop If all the buildings in a locality are rented on this basis, without distinguishing between the ground-rent and the building-rent, as is the case in some countries and cities, it becomes practically impossible to determine how much of the rent which is paid to the owner of the land and building is true ground-rent and how much is true building-rent. But where land is held on lease, and the buildings constructed by those who are not owners of the ground, the distinction is easy, because it is already made in commercial practice.

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[11] "Rent is due to differential quality in the factors of supply, and is true rent or quasi-rent according as the supply is incapable of increase or capable of but slow increase, . . . evidently rent enters more or less into the remuneration of every factor as well as land." Smart, *The Distribution of Income*," p. 305.

[12] For an example of the limitation of the term rent to actual payments, contrast the following with the preceding definitions. "Rent only arises when the property in question is lent out to some one. When the owner of the article uses or works it himself, there is no such thing as Rent" MacLeod, *Elements of Political Economy*, ch, II, section 2, para. 3.

The writer regrets that the lack of library facilities as he is completing this article prevents him from citing other references regarding the definition of rent.

[13] In the terminology of Marshall's *Principles of Economics*, payments for the use of these are termed respectively, rent, quasi-rent and interest, on the ground that in the first case, payment is made for natural resources, in the second case payment is made for man-made resources which after having been constructed seem analogous to natural resources, and in the third case payment is for the use of savings, or man-made resources.

Another differentiation in rent is the separation of an allowance for depreciation from the payment for the use alone, were the good indestructible. Contract rent includes both ; though the receiver of rents may handle his bookkeeping in such a way as to separate depreciation from the net rent, or pure rent.

Just as the most distinctive quality of labour is its perishableness, so the most distinctive quality of instrument-goods is their durability or permanence. Durability is, of course, a relative term. However, things which last less than a year are not often rented—they are more apt to be purchased outright by the consumer. It is when we find things lasting a decade or more, or perhaps in perpetuity, that we find the phenomenon of rent in its most typical form Two other qualities there are which divide by a gradual line of demarkation instrument goods into two classes, and which are of fundamental importance in value determination. These are : (1) reproducability, and (2) fixity of position, or transportability. Some instrument goods, like machines, can be readily duplicated and transported. Others, like irrigation works, can be duplicated—at enormous expense—but cannot be transported. Once produced they are fixed in position. The same is true of agricultural land in the large. More agricultural land can be produced—that is, non-agricultural land turned into agricultural land—just as trees can be converted into lumber. But to do so is expensive. Land cannot, however, be transported. True, in Belgium a peasant who sells a plot of land and buys another will take off the top few inches of soil and cart it to his new home. But this is only the soil, one part of the land. For land is a very complex thing, not so simple a conception as it seems at first thought. Of this more in a paragraph below. Let us turn now to the price fixing process, to the determination of the share of the value-proceeds which goes for the use of durable production goods.

b. *Determination of the Amount of Rent*

For an understanding of the maximum demand offer for instrument goods we must turn to the law already mentioned, the law of derived demand, or the principle of specific productivity. The maximum that can be offered for a machine, a building or a piece of land is the income that may be derived from the use of that machine, building or piece of land.[14] We have already noted that the degree of reproducability, or the ease with which it is duplicated, is an important feature of durable production goods; we have now to note the great influence which this degree of reproducability has upon the supply of such goods, and hence, upon their cost to the entrepreneur, or the distributive share of the value-proceeds which accrues to them. If the good is easily reproduced, the supply or reservation price (either in the form of rent or purchase price) will be much below the maximum price offer, and the actual price (either rent or purchase price) will fall somewhere between cost of production and maximum price offer according to the law of derived demand. If there is free competition, the competition between sellers will tend to keep the price close to the cost of production. But if the cost of production is relatively high, that is, is as high or higher than the maximum price offer, it is a good which at cost of production prices will not be used, and therefore will not be produced for sale. If the production good is one that already exists in certain limited qualities and the cost of reproduction or of duplication is very high, competition among users to obtain control of this limited quantity will force the rent (or purchase price) close to the limit of the maximum price offer in accordance with the law of derived demand or the principle of specific productivity. If the production good is one in which the cost of reproduction or of duplication is very high, but which exists in quantities which are large compared with the needs therefor, and which is not rapidly wasted by non-use, the rent will tend toward zero under the ordinary rule of excess of supply. Even though private ownership in such a sort of production good may be established, the lower limit of rent is zero, for the good will not be withdrawn from use even though little remuneration is offered.

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[14] This principle throws much light on the comparatively slow introduction of machinery into India. With its huge population and cheaper labour, the substitution of machinery for labour does not furnish as large an additional income here as in the West, and hence the maximum price offer is lower than in Europe or America. This, together with the fact that the supply price is much higher (because of transportation and allied charges), is sufficient to show that the margin of profitable utilization (quantitatively) lies at a point far below what it does in Europe and America.

The effect upon rents of the time consumed in the process of reproducing or duplicating any factor of production has been noted by many economists and need not be elaborated at length here. Marshall has pointed out with sufficient emphasis that in the case of such production goods as buildings there may be a great difference between short-time and long-time supply prices, because of the fact that in the short time reproduction is very difficult or impossible ; and rents thus tend in the short-time period to the maximum price offer according to the law of derived demand, while in the long-time period reproduction is possible and rents tend to be lower because they tend to conform to the cost of production.[15] It is perhaps worth noting that in short-time periods even buildings and machines may be in such great plenty that rents fall not only below the maximum price offer but also below the cost of production rate, and even to zero.

The fixity of location of many forms of durable production goods, as contrasted with consumption goods, has an important bearing upon supply. It is not the existence of things—land, buildings or machines—but their availability for certain uses which constitutes supply. Thus the existence of empty houses in various places in India does not affect the supply of dwellings for industrial workers. The empty buildings are not available for that purpose because of their distance from their place of work, and their non-transportability. It is the same with land. There are millions of acres of fertile land in the world uncultivated. It is largely due to lack of transportation facilities that this land is not available for growing food supplies for the people in other parts of the world. There are probably huge mineral deposits in the extreme north, but their existence has no effect on the price of iron ore or of coal—in India or in any other country. A modern water turbine for producing electricity in the middle of the Sahara would be absolutely worthless—no part of the world's supply of turbines.

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[15] The way in which this is brought about through the rate of interest and the process of capitalization, as also the entire problem of the relation of rent to purchase price will be discussed in the following section on interest. See Marshall, *Principles of Economics*, book V, ch. V.

c. *The Distinctive Qualities of Land*

The preceding pages have been devoted to the thesis that the essential nature of rent-bearing goods is that of durability, and that the amount of rent is determined mainly by (1) existing natural supply, (2) replaceability and costs of production in short and long periods, (3) durability, and (4) transportability (of the good itself or of other factors of production). This conception, I believe, should replace in our modes of thought the idea that rent is the income derived from the gifts of nature, or from land. These rentable goods, or durable production goods, thus include not only what is usually called land by many English economists but also a large part of what is by them called capital, or capital goods. This is not to deny, however, that land, or at least certain kinds of land, is a form of production goods which has specific qualitites of its own, and that these are of sufficient importance to warrant special consideration of them. There are reasons why most economists have regarded land of such great importance that they have treated it is a separate factor of production. It does indeed deserve special treatment; but not on the ground that it is the only rent-bearing factor of production.

The distinctive qualities of land which set it apart from other factors of production are usually given as (1) fixity of supply, (2) indestructibility, and (3) a gift of nature. That all of these distinctions are only partially valid should now be evident. As regards fixity of supply, there are two meanings that may be attached to the phrase. The one usually given is in reference to the amount of land in existence, which is, in fact, practically a fixed supply. But we have already seen that mere existence does not constitute supply in the economic sense. The narrower conception of fixity of supply in reference to land is of more importance. The amount of land available for certain purposes—for raising food for the people of Allahabad or of India, or on which to erect office-buildings for the merchants and bankers of Bombay—for these there is a definite supply, which at any moment seems practically, if not absolutely, fixed. From a long-time point of view there is not quite so much fixity, for seacoasts may be reclaimed, swampy land drained, dry land irrigated so as to make it cultivable, or a railroad built into a country hitherto not easily accessible; but even then the supply is not subject to the rapid increase to which other factors of production are subject, for this process of making land is, in general, a very expensive process. As to indestructibility—there is little indestructible about land except the space element. Its fertility, its most important quality in agriculture, may be easily destroyed. Its access to sunshine and rain may be separated from the ground surface, though it is only in cities and in special forms of agriculture, such as flower-growing, that this fact becomes of practical importance. But throughout wide areas the content and distribution of moisture in the soil can be greatly modified. Thus while spatially land cannot be destroyed, the availability of the land for certain purposes can be, and often is, destroyed. The gift of nature idea is one upon which we have already commented. In nearly all parts of the world, certainly in the more thickly settled parts of the globe, man has radically altered the land surface. Clearing of forests, drainage, change of vegetation, leveling—these have so modified the nature of the land that present-day land is in large part the result of man's handiwork. Present-day land in every thickly populated country is therefore so much a result of these improvements that it can as truly be said to have been "made" by man as iron and steel. In both cases nature's gifts have been transformed to a greater or less degree, and in both cases the product which we have today is partly a gift of nature and partly the result of man's workmanship.

Yet land does have distinctive qualities which, while not subjecting it to different laws in respect to the share of the value-proceeds of industry which is allotted for its services, do, nevertheless, set it apart from other factors of production and even from other forms of durable production goods. How can these distinctive qualities be best stated, so as to be enlightening rather than confusing, to economic thought? The writer would venture to state them as follows:

(1) The supply of land does not automatically vary according to the size of the population, as does labour, nor can it readily be made to vary with it, as can the supply of many other production goods.

(2) Land for agricultural and building purposes is not as readily made available for use, nor as readily destroyed, as some other forms of production goods.

(3) Land is not transportable except in very limited quantities. It is inseverably connected with space, and can neither be moved to other parts of the earth's surface, nor up in the air.

(4) The quality and usefulness of land vary, from piece to piece, with a variation which is immense in its range, but fairly continuous in its gradation.

(5) Compared with other production goods, the quantity of land needed is very vast—for food-producing purposes—and is necessarily spread out over a large amount of space.

Of these distinctive qualities the fourth is worthy of special attention. While all factors of production are subject to differential advantages as between different units, land presents these differential advantages in the most marked degree.

Recognition of this fact and of the consequent differentials in rent, together with recognition of the fact that little or no rent is not likely to drive land out of use (non-use offering no attractions to landowners), led early in the history of economic thought to the elaboration of what is usually called the "law of rent." The case of land is, in fact, the clearest and most easily understood application of the *law of differential advantages*, and the "law of rent" helps in the understanding of the amounts of rent which are likely to be paid for different grades of land. But caution must be taken in the casual interpretation. In stating the law of rent, we start from marginal no-rent land, and from that measure the amount of rent on rent-bearing lands of varying qualities. That we measure rent from the margin does not, however, invalidate the contention that the margin itself is a price-resultant rather than a price-determinant. The analogy of a river is most illustrative of the facts of the case. Fundamentally, the location of the margin, or edge of the water, on a river bank is the result of two forces—one the volume and speed of the water, and the other the configuration of the river bed. Yet all measurements of the river proceed from this margin, or water's edge. The width of the river is from edge to edge. As for the depth, it is from the level at the margin that we begin: at the margin it is zero, just as rent at the margin is zero. Likewise the depth at any point is measured according to the differential in slope from the margin, just as rent on any piece of ground is measured from the differential qualities of soil and location. But in casual analysis we must say that the level of the water, as well as its depth, depends upon the water-volume and the river-bed configuration. So rent really depends upon the demand and supply of land of definite qualities—not on the marginal productivity of the land. Marginal land is the point from which measurements of rent are made: the margin itself is no less a result of price, rather than a cause of it.[16]

[16] Much of the confusion in regard to this may be due to the ambiguity of the word "determine." Determine, that is, measure, the depth of that river, we say. We also say that one thing determines another, meaning is the cause of. Economists using the word in the first sense have probably been understood to mean the second.

IV

The Return for Postponed Consumption—Interest

a. *The Nature of Interest*

The foregoing discussion of rent has been mainly in terms of annual payments for the use of durable production goods. These durable goods may, however, be purchased outright instead of rented. In this case, that is the relation between the annual payment, or rent, and the purchase price? In ordinary business life there are certain durable production goods, such as machines and equipment, which are more often purchased than rented. Considered from the point of view of the investor, we see at once that there is a tendency in business usage to distinguish between the income derived from ownership of land or buildings and that derived from ownership of machinery or equipment. The income derived from ownership of land and buildings is commonly called rent; that from the ownership of machines and equipment is commonly called interest. Careful examination, however, shows that the distinction is not between different classes of goods; it is rather between different ways of computing income from production goods. If the income from land or buildings is computed, not according to the area of the land, or the size, number and character of the buildings, but as a percentage of the purchase price or capital value (price at which it might be sold) of the land or buildings, it is likely to be called interest. Thus a joint-stock company acting as a zemindar, of which there are a few in India, would be very likely to speak of the net rents it receives, after deducting the land revenue due to government and overhead administrative expenses, as a return or interest upon their investment. In dealing with an investment in goods which are commonly purchased outright, instead of let for hire for periods of time, this is the common method of estimation. There are many investments of which it seems almost, if not quite, impossible to conceive of the things purchased as receiving a hire-price or rent. Thus, if a man has Rs. 4,000 for investment, he might buy land and receive an annual income of Rs. 200 in rent. But suppose he turns merchant and invests this sum in a stock of cloth, which he sells and then buys another stock and sells again, each time at a profit. His earnings, after deducting expenses, are a complex element, consisting partly of earnings of management and of a remuneration for taking a greater risk than if he had invested in land. Putting all these aside, however, there is an element which represents a return upon the purchase price, an income from the investment, just as does the Rs. 200 from an investment in land. This amount, if we suppose it were also Rs. 200, cannot be called rent, for rent is payment for some definite good for use during a period of time, the good to be restored to the owner at the end of the period. What is its essential nature?

To get at the essential nature of this return upon investment we need to consider the third alternative of the investor. He might have used the Rs. 4,000 in immediate consumption goods. Instead, he preferred to forego the present use in order that he might have the annual income for future use. This is true whether he invests in land or in a mercantile establishment. The investment is made because the investor prefers the future incomes spread out over a series of years to present income in a lump sum. The rate of interest, then, or the rate of time-discount, is the way in which future income and future values are brought into comparison with present income and present values. It may be considered, from the point of view of the investor, as a sort of payment for saving or abstinence, that is, for the non-use of consumption goods for a period of time. From the point of view of a borrower, interest is the price paid, and from the point of view of a lender, interest is the price received, for the use of unspecialized purchasing power, or the power to obtain goods. It is sometimes said that interest is the payment for the use of money, just as rent is the payment for the use of land. If we use the term money in its broadest possible sense, as ability to buy things, this is substantially true. But loans may be made in terms of other commodities than gold or the recognized media of exchange—as in 1922 several German States and private enterprises floated bond and stock issues payable in such commodities as rye, coal or coke, or the equivalent value thereof. But if it is an error to say that interest is the price paid for the use of money, it is a greater error to say, as many economists do,[17] that interest is the price paid for the use of "capital goods", or man-made production goods. Amounts paid for the use of those goods directly are rent; amounts paid for the *use of the ability to get and to hold goods are interest.* And here, as with rent, it makes no difference whether the goods are man-made goods or nature-made goods.

b. *Determination of the Rate of Interest*

As in the case of other sorts of production goods, discussion of the rate of payment for "purchasing power," or "ability to get and hold goods," or of the "fund of capital" is a discussion of the demand for and the supply of this "purchasing power" or "fund of capital." Before proceeding with this discussion, however, we must note that actual interest payments, or market-interest, consist of three parts—management-interest, risk-interest and pure interest. Every one who is making loans has to see about collection of the interest, and of the principal when the loan is due, and to make choices regarding reinvestment. There is a considerable amount of personal effort involved in such management of investment. Savings Banks pay a low rate to depositors, but themselves loan the funds so received at a higher rate. The difference between the two rates is in large part management-interest, the Savings Bank doing considerable work in the nature of management. Then there is the difference in risk in different investments. The Savings Bank, again, takes practically all the risk of loss that may occur in some of the investments. Some governments have to pay higher rates of interest than others, when borrowing from the same group of financiers, because of the greater risk of failure to pay. It is pure interest, or the balance after management-interest and risk-interest are deducted, that is the payment for the use of purchasing power, or the fund of capital. The fact that interest is paid is evidence of the demand and supply sides of this purchasing power, or fund of capital, just as the fact that land rent is paid is evidence of the demand for and supply of land. Our problem now is the same as that of other factors of production—from whence arise the demand and the supply?

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[17] "Interest is the price paid for the use of capital." "Capital.. consists..of real things; factories, machinery, materials and the like." Henderson, *Supply and Demand*, p. 119 Marshall, it should be remembered, while virtually defining capital as man-made resources, distinguishes between the income from fresh investments and that from old investments, the former only being true interest, and the latter akin to rent, or quasi-rent. See *Principles of Economics*, 6th. ed., p 412 and 592-3.

Why, then, are men willing to offer a price in order to obtain the power of purchasing goods, or the power of commanding the use of goods? Obviously because they want to use that power and using it, to obtain an income. They may use it in paying wages, in gaining the services of labour. It is then because of the productivity of the labour they hire. Or they may use it in buying or renting land, buildings or machinery. It is because of the fact that the land or buildings or machinery is productive. Or they may use it in organizing a new business, in paying traveling expenses, lawyers' fees, and similar expenses. For such organization is productive. The entrepreneur, or the undertaker, thus wants *capital*, and is willing to pay something to obtain *capital*, or the power of purchasing or of commanding goods, because thereby he can bring together and use various sorts of goods and services which are productive, that is, which in cooperation produce other goods. A large share of the demand for loans is thus based on the physical productivity of goods which the loan may be used to command. What is the maximum price offer therefor? Evidently it will depend in each particular case upon the value of the product thereby brought into being. In accordance with the law of derived demand, the maximum will be the amount (value) which the use of the unit of capital will add to the product. If by utilizing Rs. 2,000 more capital, a millowner can increase his earnings by Rs. 200 per year, Rs. 200 (or 10%) is the maximum price offer which he can make for the use of that capital.

But the demand for loans for productive purposes is not the only demand. There is also a demand for consumption loans. These loans are of greater importance in India than in western countries because of the customary expenses of weddings, funerals and feasts. What will be the maximum price offer for such loans? Here one must go back to subjective valuations and to the concept of the comparison of utilities. When a person is spending Rs. 100 on clothes he will compare the utility of one article with the utility of another. In this case, one compares the utility of money or of purchasing-power (the power to purchase) or of goods-in-general *today* with money or purchasing power or goods-in-general at some *future time*. If I were starving today, I'd gladly promise to give a man two dinners, or even a half-dozen, next year, if he would give me one today. So at a wedding the father feels it necessary to spend a large amount, and readily promises to part with a much greater amount at some future time, if only he can obtain this amount at the present time. He thus places a much higher estimate, or subjective valuation, on *goods in the present* than on *goods in the future*. The ratio of this estimate or desire for present goods in preference to future goods is his maximum price offer, or maximum rate of interest offer.

It is to this same conception of the relative worths, of the comparison of the utilities, of present goods and future goods that we must turn for an understanding of the supply of capital. Some saving would doubtless exist if there were no interest, or even a negative rate of interest. In fact the people of India have thus saved for many years and in considerable amounts, without interest, for their savings have taken the form of hoarded coins, or of jewellery. But why is it that, instead of putting one's savings into jewellery, one can put them into a bank and receive therefor not only the value of the principal at some future time, but also something more as interest? Simply because there are more people who want present goods worse than they want future goods than there are people who want future goods worse than they want present goods. In point of fact, most people view present goods with more esteem than future goods, mainly for psychological reasons. In the first place, the future is uncertain. The present is here, and we feel it keenly, experience its pleasures and pains, its sorrows and joys ; we do not know what will happen in the future. In the second place, besides the uncertainty of the future, there is the much keener awareness of the present. Even though we feel certain and sure of the fature, still we regard the present more highly. So it is that in general people experience a preference for present goods over future goods—if the amounts are equal. This preference for present goods is strongly reinforced by the fact that possession of certain kinds of present goods means an increased amount of goods in the future; so that even the demand for goods in the future becomes transformed into a demand for present goods.

Viewed in this light, interest is paid as the reward for waiting—the return to postponed consumption. And this would seem to be its essential characteristic. Modern methods of production are roundabout. Some one must set aside goods—must abstain from the enjoyment of using up goods in order that production be carried on. Someone must allow their income to go, not into consumption goods, but into production goods ; and the waiting needs to be rewarded, or there would not be sufficient people ready to undertake it. Thus while it is the productivity of capital, or of savings used in the productive process, that is the principal explanation of the demand side of the interest problem, and that explains why interest *can* be paid, it is the waiting element that is the explanation of the supply side, that explains why interest *must* be paid. This *time-discount* in favour of the present, analogous to the *place-discount* in favour of things near at hand, is the most significant and essential phase of interest. In fact, the general rate of interest (of pure interest, of course, not market interest) is a measure of the preference, in general, of the people for present rather than for future goods.

The market rate of interest, or rather, market rates of interest, will naturally vary from this pure time-discount in accordance with the elements of risk and management involved. Besides this variation in the degree of risk and management, there is no one market, just as there is no one market for any commodity. The London money market and the New York money market are as distinct as the Liverpool and New York cotton markets. Then just as with retail stores there are markets for the rich and markets for the poor, or markets for one group of people and markets for the other, with differential prices, that is, different prices for one class than for the other, so in the money market. There may be different markets or different rates according to the nature of the loans—consumption loans, investment loans, commercial loans, foreign trade loans, government loans—different rates, that is, aside from differences in risk and interest. Especially is there likely to be a difference in rates between long-time loans, and short time loans, rates for the latter being subject to much greater fluctuations than rates for the former. Up to recent times the private Indian bankers had their own clientele and the English banks had theirs, Indian banks rarely dealing with the same banks as English firms. In consequence the rates of interest were fixed with very little relation to each other : sometimes the rates in one market would be high and in the other low, and sometimes the reverse would be the case. But on the whole these differences are slight, for unspecialized purchasing power, or loanable funds, is the most easily transformed and the most easily transported of production goods ; it is the most mobile of all the factors of production.

c. *Relations between Savings, Resources, Interest and Rent*

There are still two problems connected with interest that need discussion. These are : first, the relation between the supply of loanable funds and the resources of the country, and the meaning of the concept of *capital* ; and second, the relation between interest and rent. These two problems are closely connected through the process of capitalization, and we shall therefore discuss them together.

There are four sources of loanable funds : first, fresh savings or current income which is not spent for consumption goods; second, funds returned to the money market after having been invested for a shorter or longer time in durable production goods, or in the payment of wages, or in other forms of fixed or circulating capital; third, temporary saving, or abstinence from consumption, while holding goods for sale or exchange;[18] and fourth, the so-called "created" funds provided by banks, which are in reality savings of the general public, made unknown to themselves, through the dilution of the media of exchange and consequent rising prices.[19] To be sure, as a matter of practice, funds from all four of these sources go through the banks in modern commercial life, and become indissolubly mixed with each other. Variations in the supply of funds may therefore be due to a change in the amounts coming from any of these four sources. How closely are these connected with the the volume of resources in a country? Fresh savings are a part of the resources of the country, but it is clear that they bear no definite quantitative relation thereto. Of two years with the same national income, there may be a large amount of saving one year and none the next. It is apparent likewise that funds arising from the return to the money market of sums previously invested in some form of fixed or circulating capital may vary from time to time without any definite quantitative relation to the volume of resources of the country. Likewise the volume of goods which are withheld from consumption pending sale or exchange, and on which banks have advanced credits, bears no definite quantitative relation to the resources of the country, though the goods are part of the country's resources. In the fourth case also, it is clear that there is no definite quantitative relation between the amount of funds thus "created" and the resources of the country. It is rather a degree of inflation.

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[18] What the bank does in cases of this kind, which are a great share of commercial banking, is essentially an underwriting of the credit of the owner of the goods, or an exchange of the owner's credit, which is of limited acceptability in the community, for the bank's credit, which is widely acceptable—that is, it is the borrower who is doing the saving which is behind his own loan.

[19] In this case the bank, which has received from the public and from the shareholders a certain amount of funds, proceeds to use these as a reserve and loans more than the amount of the reserve on the assumption that its own notes or other promises to pay in the form of deposit credit will be accepted by the public and that it will not be called upon to part with its reserves to any great extent. It is evident that there has been a definite addition to the quantity of media of exchange which is being offered against goods in the market, that prices must rise (or be prevented from falling), and that this will involve a certain amount of forced saving on the part of some people in the sense of lessened consumption.

The foregoing considerations make it clear that the loan fund is not coterminous with the total resources of the country, nor with the volume of "capital goods", as that term is usually employed to mean man-made resources such as buildings and machinery. Though ultimately dependent upon the country's resources, and in fact a part of those resources, the size of the loan fund does not bear any definite quantitative relation to the volume of resources. The current idea that the supply of loanable funds would be larger and the rate of interest lower if hoarded rupees and jewellery not required for ornaments were deposited in the banks is doubtless correct, yet such a course would involve no change in the quantity of "capital goods."

If, then, the rate of interest is fixed by the demand for and the supply of loanable funds, and the supply of such funds bears no definite relation to the quantity of "capital goods," should not the term "interest" in economic theory be limited to payments for funds actually borrowed? Is there no place for the idea that "capital goods" can earn interest, the idea that the income derived from the ownership of buildings and machinery and other forms of production goods should be termed interest, although it accrues to the owner and there is no loan involved? The answer lies in the process of capitalization, and the attribution to such "capital goods" of a *capital value.* With a current rate of interest, or a ratio of time-preference established in the money market, that ratio of time-preference is applied to all goods which have the power to give income with passing time. If the ratio between the desire for present goods and the desire for goods a year in the future is established at 100:106, that is, if the rate of interest is 6%, it is easy to compute the present value of any future income or a series of future incomes that may accrue with the ownership or use of production goods. Thus the present value of a piece of a property (without allowance for depreciation) is obtained by the well-known formula of dividing the annual income from the property by the rate of interest expressed as a decimal. This present value of anything set aside for the purpose of receiving the future incomes is properly called its *capital value*, and is the amount for which the property will sell if placed upon the market.

This brings us to the true nature of *capital*, which is logically anything set aside for the purpose of receiving the future income. Savings exist at the time of savings in the form of purchasing power. True, they may be commodities, may be gold or silver or ornaments, but it is their existence as a fund of value which makes them loanable upon interest. As such they are part of the wealth of the country, and part of the loan fund. It is when they are set aside, whether directly as commodities, or indirectly through the loan process, for the purpose of aiding in the production of future incomes, or incomes with passing time, that they become *capital*. If they become embodied in durable goods, such as buildings or machinery, in modifications of soil or topography, they are still a part of the resources of the country and of the capital of the owner. Nor does it matter whether such goods originated with nature or with man. It makes no difference whether man finds a good, or whether he makes it—if he sets it aside for the sake of the future incomes, it is *capital*, and the amount for which it would sell, calculated as the present value of those future incomes, is its *capital value*. Land and natural resources are thus rightly considered a part of the capital of the country, if they are set aside for the purpose of earning future incomes, and those incomes are discounted, or capitalized, into present values.

Interest, then, while meaning the payment for the loan of money or other form of purchasing power in its narrower sense, means, in its larger sense, the return upon any form of *capital value*. Just as the power to purchase may, when loaned, earn interest, so anything set aside for the receiving of the future incomes earns interest when that which is set aside is measured, not in terms of physical size or number, but in terms of purchasing power, or of the media of exchange; that is, land, buildings, machines and all sorts of goods may earn interest upon their capital value.

The relation between rent and interest follows clearly. Income derived from durable production goods may be termed *rent* if it is computed according to direct measurement, such as per acre of land, or per building, or per square feet of floor space, or per number; the same income may be termed *interest* if it is computed according to the *capital value* of the land or building or machine. It should be noted that there cannot be rent on goods which are not durable (which disappear with use) or which do not remain in the continued possession of one person, such as coal used as fuel or a merchant's stock of goods, for such goods cannot be used for a length of time and then returned; but there can be interest on their capital value. Nor is the possibility of interest confined to these forms of production goods. Under the system of slavery, or when private property is allowed in human beings, the income derived from their use is capitalized, they acquire a capital value which upon sale becomes the purchase price, and the income may be computed as interest upon this capital value. If any concern has a peculiar advantage, be it only the habit of the public to purchase a good with a particular trademark or name, which is a source of income with passing time, this income may be capitalized as good-will and stock issued therefor or a purchase price received therefor on the occasion of a change of ownership, and the annual income be termed interest thereafter.

With such an understanding of the terms rent, interest, capital and capital value, economic theory joins hands with business usage; and the fact that business usage has developed and maintained these meanings in spite of a different usage on the part of economists for half or three-fourths of a century is, after all, substantial proof that it is the best usage.

V

The Return for Uncertainty-Bearing

It has been necessary to treat of the two distributive shares, rent and interest, at considerable length because of the various ways in which these terms are used by economists.

It will not be necessary to dwell upon the other three distributive shares at such great length.

The taking of risks, or uncertainty-bearing, as Pigou puts it,[20] is inescapable in modern industry. It is, in fact, present in every form of economic organization, but of infinitely greater importance in machine roundabout industry than in the village economy of ancient India. The introduction of a new process, a new invention, a successful rival—all may imperil the earnings and the value of a vast plant and organization. Under the money economy and with production carried on for profit, a change of prices may mean huge losses instead of the expected gain. It is inevitable that these risks should be taken by property owners. Those who have no property cannot take chances of losing it. Sometimes risks are taken far in excess of the property owned, but if losses occur they must necessarily fall on someone else. It is the creditors who lose in a bankruptcy case. This is not to imply that the wage earners take no risks in modern industrial society; they do, risks of unemployment and risks of wage reductions. But if an enterprise fails, the labour may be transferred elsewhere. Invested capital cannot be so easily transferred. It may, in fact, now be valueless, since its value depended upon its earning capacity.

Uncertainty-bearing is usually regarded as the typical function of the entrepreneur, or undertaker. But in what is really the typical form of modern business organization, the joint-stock company, entrepreneur activities have been divided into several parts. Along with this division has come a division in the uncertainty-bearing. Shares of stock are issued with varying degrees of uncertainty attached to them. There may be debenture bonds with very little risk of loss, especially if the amount of such bonds is less than the scrap value of the plant of the company. Cumulative preference shares have only a moderate amount of risk attached, common shares a great deal, and the value of deferred shares may be mainly in the uncertainty attached thereto.

[20] Pigou, *Economics of Welfare.*

The fact that uncertainty-bearing is bound up with property and with production goods makes it impossible in practice to separate entirely the payment or reward for undertaking the risks of loss from the payment for the use of the property aside from this risk, so that the business world has not developed a separate term for the earnings or distributive share of the value-proceeds of industry that may properly be considered to be due to the uncertainty-bearers. Nevertheless, the division of the entrepreneur activity in the modern joint-stock company has led to the distributive share attached to uncertainty-bearing taking several forms, of which the principal ones are the following: (1) for risks assumed by creditors and debenture holders and bondholders, risk-interest, or a part of the payments for interest; (2) for risks assumed by shareholders, a part of the dividends; (3) for risks assumed by private business undertakers, a part of what in accounting practice is termed "profit," or as we may say, risk-profit; (4) for risks assumed by professional speculators, who are a class of risk-takers, practically all their "profit," aside from an element for personal effort; (5) for risks assumed by insurance companies, a premium.

The very nature of risk makes it seem almost impossible that there should be worked out in the market such definite rates of payment as there are worked out for the payments to labourers, to suppliers of raw material and of durable production goods. Yet in certain types of risk this has been accomplished through insurance principles. Insurance companies are in the business of taking risks, charging a price or premium therefor, and so managing their business as to make a profit themselves, just as the firms supplying raw materials sell these raw materials and make a profit for themselves. By taking advantage of the various sorts of insurance, the entrepreneur shifts a very material portion of his risk, and what was formerly risk-profit now becomes insurance premiums. As insurance companies grow and insurance spreads to other sorts of risks differentiation will become more and more marked; so that it seems likely that the insurance premium will soon become the typical form of remuneration for uncertainty-bearing, just as interest is the present typical form of remuneration for capital, or for goods set aside for further production.[21]

If, then, we regard the insurance premium as the typical form of remuneration for uncertainty-bearing, or at least as the only form in which there has been worked out a market rate for the bearing of uncertainty, we have the same problem as with other distributive shares—what determines the rate ? To which we make the same general answer as in other cases—the demand for and the supply of units of uncertainty borne, or of insurance policies. It is obvious that there are peculiar features to this demand and supply, just as there are to the demand and supply of each of the other factors of production. In insurance, supply or reservation prices are fixed by careful mathematical calculations in accordance with the laws of probability, and the competition among insurance companies keeps the rates close to this reservation price, just as competition among dealers of raw materials keeps the prices for raw materials close to the cost of production or reservation prices.

VI

Payments for Societal Aid, Protection and Good-will

Each of the sorts of factors of production has, we have seen, its own peculiar features. The most distinctive feature of societal aid to industry is that it is of necessity furnished by the general public, either by a passive acquiescence toward an industry, or by some collective action favorable thereto. Such elements in the public attitude as protection cannot be furnished satisfactorily in a competitive manner. Being collectivistic instead of competitive, the payment for the service of protection and governmental aid is taken outside the competitive markets, and appears in the form of taxation. As a part of our communal, rather than a part of our competitive economic organization, rates of payment are subject to different principles of determination than in the case of other factors of production. What these principles are, being discussed in elaborate treatises on taxation, need not be discussed here. Here we need to note only that from the competitive business man's point of view, the tax is an arbitrarily fixed amount imposed upon him. He may or may not recognize that the tax is a sort of remuneration for the communal aid which he receives, such as protection, but at least he knows that the amount of the tax is not subject to the operations of the same laws as the other factors of production. Nevertheless, the business man has to fit the tax into his business policies. If an item of any sort of one of the factors of production which are paid for competitively rises in price above the business man's maximum price offer, he will either have to substitute some other good, or go out of business. If the tax is fixed too high, that is, above what it is worthwhile for the business to spend for protection and governmental assistance, the first of these alternatives is not open, and the only course is to go out of business. That this is likely to happen, and often does happen, is proven by the history of business in relation to taxation.

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[21] The present situation in this respect is like the situation in regard to "interest and profits," at the time of the early English economists. Then the payment for the furnishing of capital was not separated from the payments for entrepreneurship in the sense of uncertainty-bearing and management—all of these appearing in the one distributive share, profits. It was when capital began quite generally to be raised by bonds and other loans, that payments for the use of capital were separated out of profits and became interest payments.

In the case of advertising, whereby the product is made known to the general public, and the public led to take an attitude of patronage and good-will toward the firm and its products, we are brought back into the competitive economic organization, for the prices that have to be paid for advertising are fixed, like any other commodity, in the competitive market. The distinctive feature about this purchase of patronage, as one might term it, is the intangible nature of that patronage. To be sure, it can be measured in sales—but the business man cannot pay for his advertising exactly according to the number of sales it brings him. Advertising rates are fixed, however, as nearly as possible in accordance with this principle, a magazine having more readers and thus reaching a larger number of the public being able to charge much higher rates than one with less readers, though what is actually purchased and measured in the contracts is space—a certain part of a page, or a section in a tramway, on an area on the walls of a railway station. On the other hand, there is the expense connected with the publication of magazines and newspapers, so that advertising rates, like the price of other commodities sold competitively, fluctuate between the maximum demand offer of the purchasers, based on their estimates of its worth in additional good-will of the public, and the reservation price of the sellers, based in the case of magazines on the cost of production. While the competition among magazines helps to keep the price paid for advertising down toward the cost of production, yet the element of differential advantages enjoyed by magazines which themselves are in public favor enables them to keep the price much above this level, possibly even approaching the maximum price offer of the advertisers.

VII

The Residuum—Profit

The term "profit," like the terms rent and interest, is one which has had, and still has (though as we shall see, it is beginning to change) a fairly definite, clear meaning among business men, but which economists have tried to turn into some other meaning. In this case, however, there has been logic on the side of the economist, for the profit of the business man is a compound element, and the economist needs to analyze it into its component parts.

In business, profit is the residuum left to the entrepreneur after his outlays on the various factors of production which he does not furnish himself. It is the difference between the value-proceeds of the industry and the expenses of production.[22] It includes any returns which may be attributed to, or distributive shares due to factors of production furnished by the business undertaker. In a private business these may be any and all sorts of the factors of production. In the modern corporation, however, with greater specialization of function, the various factors of production tend to be sorted out from each other, each furnished by a separate person or group of persons, so that there is little left in profits but a residuum after all the factors of production have had their distributive shares. Thus profit may include (1) remuneration for the using up of non-durable goods furnished by the entrepreneur (not very common in practice), (2) remuneration for the entrepreneur's time or personal services, more exactly called implied wages of management, (3) remuneration for the use of land or of durable production goods furnished by the entrepreneur, or more exactly, implied rent, (4) remuneration for postponed consumption, or the furnishing of purchasing power, or implied interest, (5) remuneration for risks undertaken, akin to insurance premiums, (6) in case the industry be a public utility owned by the state or community and exempt from taxation, remuneration normally due to the state for taxes.[23] The profit of a cultivator working land for which he pays annual rent or of the ordinary farmer in England would include the second, third (for machinery and tools), fourth (for his own investment), and fifth. The profit of a merchant hiring his building with all equipment and borrowing all his capital upon interest would include only the second and fifth of these. If he, however, furnishes his own capital but does no work of management, leaving this to a paid manager, the second would practically disappear, and there would remain only the fourth and fifth. It is theoretically conceivable that a man desiring to be a merchant should buy all goods from other parties, hire a paid manager and perform the minimum amount of management himself, borrow his capital, take out an insurance policy on the success of the business (a form of insurance which is not common at present but has often been suggested), pay his taxes to government and for advertising to the newspapers. All these would have then disappeared from the profits. Would there be anything left? There might, and this is the real residual element, or what we could properly term *pure profits.*[24]

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[22] "The expenses of production"—not the cost of production. For the difference between the two terms see the article "The Theory of Distribution," *Indian Journal of Economics*, October 1923, p. 26.

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[23] This seems to be the only case where societal aid could be furnished by the entrepreneur, that is, when society is the entrepreneur.

[24] Marshall's use of the terms "normal profits" and "surplus profits" is fairly satisfactory in distinguishing between these two sorts of profit. The only objection to it is in the assumption, which could be tested only by elaborate statistical study, that the former group alone constitutes the normal run of profits. It is quite possible, it seems to the writer, that with industry organized as it is at present with a vast amount of artificial and natural monopoly rights, and with a lack of complete competition, an element of "surplus profits" could almost be considered to be the normal course of business.

Of what nature is this residuum, or pure profit ? Why should there be anything left of the value-proceeds of industry, or of the selling value of the product, above these elements in profits ? We know that there are such residuums, however, and that they are frequently very large. These may be due to (1) lack of equal and free competition, (2) changes in prices or costs throughout a period of time, and (3) social and political changes. Included in lack of equal and free competition is (a) the superior bargaining power which a firm may have over labourers and sellers of raw materials which is not due to expert management but to the nature of the situation under which the bargaining takes place, (b) superior bargaining power over competitors because of size or of financial strength, (c) monopoly or a partial monopoly of some sort or another, (d) a superior process which is known to this firm and not to others, (e) popular sentiment, or the patronage of the public which may be due to causes entirely outside the company' s advertising.

There is a tendency in business accounting nowadays to use this concept of pure profit in the place of the broader and older concept of profit, by making an allowance in the financial statements for interest on the undertaker's capital, and for payment for any other factor of production furnished by him, and calling only the residue profit. Thus farmers in America frequently say they have made no profit on a year's operations, meaning, not that they had had nothing for themselves out of the value-proceeds of their crops or other agricultural produce, but that after allowing for interest on their investment in land, buildings, machinery and farm stock and after deducting wages for their own labour, there was nothing left. The term loss is used in a correlative fashion to mean the deficiency of the value-proceeds to cover adequately all the *costs of production*, even though part of these factors are furnished by the entrepreneur and are not included in the expenses of production.

VIII

General Principles of Distribution among the Factors of Production

In discussing the various distributive shares, we have been treating of the peculiar qualities of each factor of production and of the peculiar influences upon the demand and supply of each sort of factor of production, and of the distributive shares accruing to each factor. Are there now any generalizations which we can make regarding the division of the value-proceeds among these factors of production? Before discussing such generalizations we must take notice of the fact that the value proceeds is itself a variable quantity. That is, it is not a fixed sum that has somehow or other to be divided among the seven distributive shares. It is the sum of what is spent on the six factors of production, together with any surplus that there may be of the selling price above these costs. It must be clearly recognized that an increased remuneration to one factor does not necessarily mean a decreased remuneration to another; for the value-proceeds may vary with the variation in remuneration of one factor. Because of this fact, the fact that the causal sequence in the variability of the value-proceeds and the distributive shares may be in either direction, it is impossible to state any general principles of distribution except in relative terms. Let us, then, proceed.

Law of relative scarcity. First in importance among these principles is the law of relative scarcity, which may be stated as follows: if two or more factors are used in the production of any good, the factor which is scarce (relatively) will receive a high (relative) remuneration, and that which is plentiful (relatively) will receive a low (relative) remuneration; but if any factor, like air, exists in quantities larger than required for all purposes, its remuneration will be zero. This law is, of course, a simple application of the accepted laws of supply and demand, yet its far-reaching importance is often confused by appealing to the idea of diminishing returns. Thus it is the scarcity of cultivable land relative to the population, as well as the fact that existing land cannot be made to yield indefinite quantities of product by added intensity of cultivation which is the cause of rent. The line of causal sequence runs from the scarcity of a necessary factor of production to the scarcity of the product, then to a high price for the product, and thence back to a high price for the scarce factor.

Law of differential advantages. Another principle underlying the distribution of the value-proceeds among the factors of production is the law of differential advantages: if any sort of factor of production exists in units varying in quality, differences in remuneration will be proportional to the differences in quality. When, as in the case of agricultural land, these gradations in quality are immense in their range and reach down to a quality which yields a product of no more value than the necessary cost of co-operating factors of production, the remuneration of that quality will be zero. When this is the case, and there is sharp competition for the use of the better quality units, such units on the margin of utilization serve as a useful place from which to measure the differences in payments in proportion to the differential advantages enjoyed by other units. Differences in quality of the same sort of factor of production may therefore be said to be causes of differences in rents; but it is the scarcity of each quality in proportion to the demand therefor that is the cause of the rent itself.

Law of the minimum remuneration of the factors of production. A third general statement or tendency regarding the remuneration of any factor of production may be stated as follows: any factor of production used in producing a good will be paid an amount at least sufficient to secure the use of that factor of production, that is, to withdraw it from some other use or from non-use. If, therefore, any factor of production is so plentiful that to use it in producing one good neither withdraws some part of the supply of that factor of production from being used in producing other goods, nor exhausts the available supply, the remuneration will be zero.

Law of the maximum remuneration of the factors of production. Such being the minimum remuneration which must be paid for the use of any factor of production of any particular good, what is the maximum that may be paid? To this reply may be made: the maximum that will be offered for any factor of production will be the present value of the amount which the use of that factor will add to the value of the product. If the factor of production is one that cannot easily be reproduced, the tendency will be for the price to become this maximum price offer. But if it is easily produced, the price will tend to equal the cost of production. We may then state the law of maximum remuneration of the factors of production as follows: the maximum remuneration will tend to be either the present value of the amount that the use of the factor will add to the product, or the cost of production of the factor, whichever is the lower. A durable factor with a very high cost of production, like land, will therefore, tend to be remunerated at the present value of the amount which the use of that factor will add to the product, or in other words, the present value of the difference between the price of the product and the price paid for other cooperating factors of production.[25]

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[25] An article on the personal distribution of wealth and income will complete this series on the theory of distribution.

THE RELIGIOUS BASE IN INDIAN ECONOMY

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The conception of religion which underlies the whole western civilization of today is very different from the conception of religion in the East, as it has been or as it is today, and is different even from that which prevailed in Europe itself during the medieval ages. Through the dominance of individualism the spirit of catholicity in the Christian religion has lost its ground in the West, but in the East it still holds its own. Here religion has not yet narrowed itself down to that sphere of human relationship which concerns itself with the relations of man to God. Our conception of religion is very wide, an almost all-embracing one. The sphere of religion to us is as wide as life itself, and we have always looked upon life as one indivisible whole. We have not yet been able to conceive of life as divided into so may water-tight compartments as social, religious, political and so on, where each is independent of the other, and where one can talk of his social code of life or of his political code of life, without taking into consideration the more fundamental relations of man and man, of one soul to another soul, and of each to that Supreme Soul which goes by diverse names in diverse places and of which each one of us is but a part. As a matter of fact we do not have a word which could exactly convey the idea of the word religion as it is understood in the English language. Instead we have the word *dharma* which seeks to lay down principles for all the various spheres of life of a man, each one of these spheres being conceived as an integral part of life as a whole. Such being the conception of our religious thought, it is not possible for us to study social activity independently of our religious ideals. The two are so mixed up in actual life that any attempt to isolate them is likely to mislead, and the safest course, therefore, is to treat the two together.

We have hinted above that religious thought in India has a peculiar spirit of catholicism about it. This spirit has manifested itself in two more or less independent ways. One is its all-embracing character, with the result that it has a great and intimate influence on the ordinary every day activity of the people of this land. The other is what I may for the sake of convenience call its all accomodating character. It provides for all the different grades of human development. Both of these manifestations have exercised a marvellous influence on the economic life of the people of India.

As a result of the influence of religion on ordinary life, we find the consumption, production and distribution of a particular class largely regulated by the *dharma* of that class. Here everything that a man does, be it ever so insignificant as the morning toilette or the evening meal, or ever so great as the marriage of a son or the transaction of the State business, is a part of his religious duty. Each has to be done with the same degree of disinterestedness in one sense and with the same degree of devotion in another. Thus every action of man is hallowed by the same high significance and is consecrated to the same high ideal, and man does whatever he does only so far as he finds it conducive to his duties of life. The element of pleasure in consumption is not able to hypnotize him into a modern belief in a high, very high, and yet ever rising standard of living, nor is his productive activity in producing commodities for ever increasing wants carried too far as an end in itself, and thus it is never pushed to that point where it becomes a source of pain. That is why we find a peculiar atmosphere of serenity surrounding Indian life, be it in the home, in the field, in the pasture, in the market or on the high road, nay even in the courts and camps of our potentates. As each individual is born and grows to maturity, he finds his place in society, and has his standard of living, his standard of work, and every thing fixed. If an individual wishes to go beyond the standard of consumption of his class, and as a result becomes too much of an acquisitive person, both society and religion come down upon him, and by one and thousand means succeed in getting a share of his superfluous possessions. And when one cannot quietly keep to himself what he has earned by the sweat of his brow, there is not much incentive left to spend time in producing more than what is just enough to give the requisite things of life. Modern students of economics and lovers of production on a large scale might see in this a fruitful source of the low level of production, and in a sense it is so; but if not carried to excess in the doctrine of renunciation or *tiaga*, it is a very wholesome principle, as it is based on the recognition of that elementary fact, which says that both consumption and production are means for the well being of man, and that man is not a means towards these. In India religion has never allowed man to forget that he is the centre of all the problems around him and that whatever there is, it is, and if it is not, then should be, for his well being.

If a student of Indian economy ignores this aspect of religious influence on Indian life he is likely to fall into the common error, by which so many superficial observers from the West have characterized Indian civilization as archaic and medieval, because they have judged her solely from her development in material civilization, and when they find her backward there, they refuse to look into those other factors that go to make up the civilization of a country. How can a man to whom civilization consists merely in the kind and number of chairs, in the stiffness of cuffs and collars, or in the speed of a car think of finding it elsewhere if these supreme tests of his high ideal are absent ? How could we expect such a man to hope to find learning, culture, and high spiritual development, or even high skill in arts and sciences, in a man clad in plain *dhotee* and *kurta*, trudging along the dusty roads of his native village, when he is accustomed to associate all these with high heeled boots, and equally high brimmed hats, both carried in a hooting car whirling along the stone paved streets of London or Paris ?

We have noted how religion in India tends to keep both consumption and production within reasonable limits. But apart from these general tendencies which regulate our industry and trade, which have set the tone of the whole economic organization, we can find its all-embracing character in the making of our household utensils and other requisites of life, which provide work and living for so many artizans and craftsmen in India. Whether it be the *badhna* of the devout Muslim, or the *sagar* of the equally devout Hindu, whether it is made by the village potter for the poor country folks, or is made by the rich worker in brass in the city for the household of the rich, it must have a peculiar shape, because in these communities religion lays it down that flowing water is ever pure, and the neck of the *badhna* and the *sagar* is always long, to make the water flow before it reaches the hands of the pious receiver. Or take the old religious practice among the Hindus of making the gift of a *sand* (a bull) on the tenth day of a person's death, after which the bull became the property of the community, and was treated with great indulgence. People looked upon him with reverence and left him to roam and graze whither he willed ; nobody molested him, and all recognised his claim to graze on the standing crops. This was very commonly done by well-to-do people of villages and towns some twenty or thirty years back ; but now it is dying out, as people are becoming more enlightend. At least they think so. It is true that people were not conscious of the economic significance of this simple practice, and to them it had its sanctions in myth and mysticism or, what is the same thing, religious superstition ; but all the same it did play a part in the organisation of agriculture in India. India is preeminently an agricultural country ; it has been so for ages past and so far as the vision can see into the future agriculture will continue to be her first and foremost industry. Every one knows that without good bullocks and oxen good farming is impossible, at least in India where horses and expensive mechinary are not used for ploughing and other agricultural operations. The released bull attended at the common expense used to serve the kine of the village and town (and that perhaps was his only function) and thus maintain a continuous supply of high class plough cattle.

These are but isolated instances out of hundreds that could be cited to indicate the degree of influence of religious thought on Indian home life on one hand, and on Indian art and industry on the other. It surrounds us in every thing great or small, just as every particle of earth in the soil is surrounded by its film of moisture.

Another feature of religion in India is that it makes provision for the spiritual development of all sorts of people. There are those to whom abstract conceptions involved in the relations of man and his soul and God as a super soul are as real as chairs and tables to the more materialistic. For such it provides high esoteric truths, for the contemplation of which no aids of instruments, beside the human mind, are necessary. There are also many for whom only seeing is believing; who cannot think of things, much less understand them, unless they see them. For these it provides the wonderful system of idol worship. And how many arts and industries, trades and crafts we owe to this peculiar feature of our religion. Our best painters, our best sculptors, our best artizans in brass and clay, of yesterday or today, have all been busy in producing images of gods and goddesses, each conceived to suit the peculiar stage of development of a particular class of people. Let religion be different from what it has been for ages past in India and then we shall find its true significance to the economic life of the people.

Or again take the devout follower of Islam; he must have a *jai nimaz* and his *tasbih,* to help him in his daily devotions, providing a flourishing trade for many an artizan in India. There are carpet makers in the Districts of Agra, Jhansi and Mirzapur making very high class, cotton, woolen and silken *jai nimazes,* while people in Eastern Bengal make beautiful *nimaz-carpets* out of ordinary grass. Or take again the *kabir-panthies,* a religious sect in India that seeks to harmonise Hinduism and Islam. Each member must have a *kanthi* around his neck and this has given rise to a flourshing craft in the city of Muthura.

Having studied the economic significance of the peculiarities of religion in India, let us pass on to study the economic consequences of the way in which religion has sought to discharge its own function. A little reflection would help us to realize that every human being has a two fold existence. Each is a spark of fire, the fire of life or the primeval source of life, call it God, Allah, Khuda, Ishwara or whatever other name you please to give it ; and each is a particle of dust; that is to say, each has its soul, and its body of physical matter ; each acquires its present form from the spirit and the matter behind him. He, the man, is the result of the combined action and interaction of these two upon each other. All religions agree on one point at least, that spirit is greater than matter in man. It is through matter that spirit works: matter is therefore essential to it. But the real question is of supremacy, and the soul or spirit in man is supreme. The chief problem therefore before religion is to secure the supremacy of spirit over matter and to try to eliminate the evils that physical surroundings may tend to develop. While studying the influence of the physical features of India upon the people we noted that they tend to develop ease loving and luxurious habits, a week and fitful will leading to an unsteady character, and resulting in wayward play of emotions, and an incipient undermining of the physical constitution. How has religion sought to eliminate these effects ? In our *shastras* it is definitely laid down that every member of society in India should at the age of six or seven leave his home and go to live with his *guru* in the guru's *ashrama*, or *gurukal* (the family of the *guru*). Every one is enjoined to live there for fifteen to eighteen years, and to lead a life of perfect continence amidst perfectly natural surroundings, and in almost a state of Nature. It is during this period that he is to pass through a very strict discipline and training of both mind and body. Here the different arts and sciences for which a particular individual may have an aptitude are to be taught. Here instruction in religion, in politics, in sociology, and in a host of other useful sciences is to be imparted. And when at the end of this period of training he is to come out he must have developed a strong body, and equally strong and trained will and intellect. The whole system of education in these inexpensive seminaries of learning when they existed, was so organised that before a man entered life, or the *grastha asharma*, he had been made strong to withstand the onslaughts of the worldly life. A comparative study of the important religions of the world leads us to say that it is in Hinduism alone that we find this peculiar system of dividing a man's life into four parts, and this extraordinary insistence on leading a life of brahma-charya before taking any active part in the affairs of ordinary life, with a set of very minute and detailed instructions to be observed during this early period of regulated instruction. Naturally the question arises why Hinduism alone amongst all the different religions of the world went out of its way to touch this problem ? To me the answer is suggested by the peculiar features of our physical surroundings. If religion had failed to indicate how to overcome the ills to which flesh in India is peculiarly subject, it would have certainly failed in discharging its function properly ; it would have failed to secure the supremacy of the spirit over matter or of man over nature, which seems to be the main object of every religion. In other religions, such as Christianity or Islam, we do not find so much insistence laid on the ways and means to secure the supremacy of the spirit over matter, simply because the regions where these religions were developed, were the regions of difficulty, and the very long period of struggle with Nature through which man had to pass before she began to yield her treasures to him in abundance, had succeeded in developing in him habits of self-control and self-reliance, had created in him the habit of looking upon nature as his handmaid, had taught him that man was supreme and that his greatness and his well-being lay in overriding Nature. The lesson that man was taught in the regions of difficulty by his physical surroundings was left in India and other regions of plenty, to the Spirit to teach, and the Spirit has not failed to do it here. Whether we are taking advantage of it or not is a different matter, but there it is ; and perhaps it is our failure to follow these very desirable teachings of our ancient thinkers that the present state of decay and degeneration in India is largely due.

When I make the above statement it is in the spirit of humility as a student who is anxious to learn by making a suggestion or two to provoke others to think on the problem, and then throw further light on it. However, the following points may be of interest in this connection. It is common knowledge that various parts of the human system reach their perfect state of development somewhere between the ages of twenty and twenty-five. In the case of females the length of this period is comparatively less. It is equally well known that those instincts in man and woman which begin to manifest themselves more distinctly at the age of puberty, and which in the fulfillment lead to a serious drain on the vitality of the human system, make their appearance at an earlier age in tropical countries than they do in colder climates. If these instinctive promptings are not kept in check, as they are not likely to be unless controlled by a strong will, the drain on the system begins to take place before a man or woman has really developed to full maturity. The prevailing idea that the vital energy that seeks its expression in what is known as the sex instinct is a specialised energy, and that the manifestation of that instinct in itself is a sufficient index of the fitness of a man or woman to participate in the utilisation of that fund of energy for the procreation of the human race, is not supported by the teachings of our *shastras*, and these teachings are being very strongly supported by modern scientific researches.

Our *shastras* tell us that there is but one fund of energy in man, and that it finds its expression in various forms; the forms, of the moment depending upon the nature of the medium through which it is passing at that moment, just as we see the same fund of electric energy, manifesting itself in so many forms, now as light, now as heat, or again as a cooling breeze of life giving air, and all through change of media. Even so with the fund of vital energy in man. It may express itself in the form that leads to procreation of human beings, or transmute itself into flesh and blood, or again be changed into yet finer forms of intellect and emotions to give birth to more subtler forms of thought in song and philosophy.

Leaving the ancient teachers apart, even modern science tells us that there are in the human system a number of glands. One set of those glands has as its function the secretion of a kind of fluid which when made to secrete through the processes of sex relations, gives rise to that particular form of vital energy which helps in the procreation of human beings. If the glands are not made to secrete externally, then they secrete internally, and the secretion is transmuted in the human system into bone and muscle. And if there is no room for its utilization in this form, then another set of glands helps it to change itself into intellect and other faculties of head and heart.

If the statements that I have made above are true, and there is overwhelming evidence to lead us to believe that they are true, then what awful waste of opportunities we make by yielding to the fitful freaks of over sensitive nature in India by making use of that fund in a less useful manner at an age; (the age of puberty of man in India is somewhere between fifteen and eighteen, and that of woman between twelve and sixteen) when it could be, and should be, transmuted into more bone and muscle, into more highly developed intellect and emotions, to give us the fully developed man and woman that now we so sadly lack. That we do use it is made perfectly clear by the table given below —

TABLE SHOWING THE PROPORTION PER THOUSAND OF EACH SEX WHO ARE MARRIED BETWEEN DIFFERENT AGES.*

	0–5		5–10		10–15		15–20		20–30	
	M	F	M	F	M	F	M	F	M	F
All religions ..	7	14	37	105	129	450	322	800	687	884
Hindu ..	10	18	48	132	159	488	359	836	703	887
Musalman ..	2	5	15	63	75	393	263	834	671	909
Christian ..	2	4	6	15	29	113	166	570	539	854
Animist ..	4	4	10	22	55	179	249	602	691	873

*Adopted from the Subsidiary Table I of 1911 census, Volume I, Part I.

The prevailing custom of early marriage in India is not in any way supported by the teachings of religion, though there are millions and millions of people who believe that not to marry a daughter before the time of puberty is a sin. This misconception is the direct result of the prevailing absence of religious instruction on the traditional lines in our schools and colleges, and the equally visible indifference to its teachings in the minds of the average people. The phenomenon of early marriage is again at the root of some of those labor problems, which form subject matter of the Reports of various committees and commissions, that have been appointed from time to time to study the conditions of labor in India. Thus in the years 1905 and 1906, Mr. Freemantle, of the United Provinces and Mr. Foley, of Bengal, enquired into the causes of shortage of labor in the two provinces, and both of them were emphatically of the opinion that as most of the laborers were married and generally left their families in their native villages, they had of necessity to go there at regular intervals to take part in the social and religious ceremonies of the home. And as most of the fasts and feasts take place during well defined parts of the year which are all determined by the semi-religious institution of astrology, the labor supply during those parts of the year becomes very much shorter than the normal. So long as the classes out of which labor in Indian mills is drawn continue to be as superstitious and as ignorant of true religion as they are now, no amount of effort on the part of mill-managers can change the things for the better.

Then again it is this very disregard of the teachings of our religion that has to account for that pitiable state of things, which has been so vividly brought to our notice by Mr. P. K. Wattal in the following table :—

AVERAGE EXPECTATION OF LIFE IN INDIA AND ENGLAND.

IN DECENNIAL AGES, DEDUCED FROM THE CENSUS OF 1891, 1901 & 1911.

(Taken from Wattal, *The population problem in India*, page 18).

Age.	Males.				
	India.			England.	
	1891	1901	1911	1901	1911
0	24.59	23.63	22.59	44.07	46.04
10	35.46	34.73	33.36	49.65	52.35
20	29.24	28.59	27.46	41.04	43.67
30	23.66	22.90	22.45	33.06	35.29
40	18.75	17.91	18.01	25.65	27.27
50	14.28	13.59	13.97	18.89	19.85
60	10.12	9.53	10.00	12.90	13.38
70	6.48	5.80	6.19	18.02	8.25
80	3.65	3.07	3.06	4.42	4.64
90	1.69	1.23	1.15	2.32	2.37

AVERAGE EXPECTATION OF LIFE IN INDIA AND ENGLAND.

IN DECENNIAL AGES, DEDUCED FROM THE CENSUS OF 1891, 1901 & 1911.

(Taken from Wattal, *The population problem in India*, page 18.)

Age.	Females.				
	India.			England.	
	1891	1901	1911	1901	1911
0	25.54	23.96	23.31	47.70	50.02
10	34.40	33.86	33.74	51.98	55.02
20	29.28	28.64	27.96	43.45	46.36
30	24.69	23.82	22.99	35.43	37.84
40	20.20	19.12	18.49	27.81	29.65
50	15.59	14.50	14.28	20,63	21.87
60	10.87	10,02	10.11	14.08	14.81
70	6.80	5.98	6.22	8.74	9.13
80	3.76	3.12	3.06	4.84	5.10
90	1.75	1.64	1.10	2.68	2.55

Here we find that not only the expected length of life at different ages in India is lower than in western countries, such as England, but also that it has been continuously decreasing during the last forty years. This means a progressive decline in the vitality of the Indian people, that is, a decline in the labor power of the country. As the writer has said elsewhere, "go to any Indian family (where three or four generations are represented) and you will see a grandfather, strong and healthy even in his sixtieth year, his son more or less healthy at forty, but with arms and chest not half as broad as the grandfather's, and a grandson with a pale face and spectacled eyes at twenty-one—a dismal evidence of the progressive degeneration of the Indian people". And what are the economic results of this? It is in this that we may look for an explanation of the comparatively low efficiency of the Indian laborer. Even in some of the cotton mills of Bombay where they are using high class machines as in the mills of Lancashire, the comparative efficiency of the Indian as measured in terms of output per day, is lower, and other things being equal, that could only be due to the inherent lack of vitality and staying power of the Indian worker. Then again, as the average length of life in India is much lower than in other countries, we get less return for the same expenditure of time and effort than other countries where it is higher. To illustrate this point let us take a hypothetical example : suppose (1) there are two countries X and Y, (2) that the average length of life in X is 50 years, while in Y it is only 35, (3) that people in both the countries are educated up to the age of 20 years, (4) that it costs Rs. 3,000 to educate each individual and (5) that the earnings of each individual after education amount to say Rs. 100 per month. Now which of the two countries gains the more from its investment in each individual? Obviously X, as it secures Rs. 100 × 12 × 30 or Rs. 36,000, while Y secures Rs. 100 × 12 × 15 or Rs. 18,000 only. At this state of affairs we may ask with Mr. Wattal, "Have we ever paused to consider what this means to us in the life of a nation as a whole? It means that people who by weight of experience and wisdom are fitted for the post of command in the various public activities of the country are snatched away by death, and that the guidance and leadership which belong to age and mature judgment in the countries of the west, falls in India to younger and, consequently, less trustworthy persons."

We have said enough to show the need for the study of basic facts about religion in India to a student of Indian economy, and we would only add this much, that unless a man familiarises himself with the positive and negative sides of religion in this country, it is not quite easy for him to grasp the why and wherefore of some of the economic institutions and activities ; and much less easy to recommend lines of reform for the bringing about of economic regeneration.

INDIAN FINANCIAL STATISTICS

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The study of finance is known to be a complex thing not within the easy grasp of the layman. Finance cannot be studied without statistics, and statistics are supposed to prove anything. In order that this difficulty or delusion may not exist, it is desirable that the financial figures of a country should be presented to the public in as simple and intelligible a form as possible. Those responsible for preparing the financial statistics of the Government of India have not kept this ordinary precept in view, with the consequence that the study of Indian Finance becomes a mysterious muddle. In spite of his admitted intelligence and abilities, Lord Curzon[1] was "considerably puzzled" in following Indian financial statistics, and the main grounds of the complaint made by him in 1900 were not removed till recently.

There are two main causes which introduce difficulties in understanding the financial statistics of the Government of India: (1) changes in classification and methods of accounting; (2) the unit of account.

Changes in classification and methods of accounting. The first systematic organisation of the finances of India was made in 1860. As one goes on reading one financial statement after another published annually since 1860, one is at a loss to find a uniform basis of study on account of frequent changes in classification and methods of accounting, particularly during the years 1860 to 1886. The consequent complexity of accounts sometimes baffles investigation, sometimes throws the investigator on a wrong track.

Cf. Lord Curzon's speech in closing the Budget discussion in March 1900: "That delusive column that appeared to represent Loss by Exchange has vanished. The dreadful and bewildering symbol of Rx. has been politely bowed out of existence. I remember last year, when still a newcomer from England, and before I had become accustomed to the multiplicity of Indian financial symbols, being considerably puzzled at the occurrence in the same statement of no less than five different methods of computation, viz: Rupees, Tens of Rupees, Pounds Sterling, Lacs and Crores. Now, I have never myself understood why finance, because it is complex, need also be made obscure."

Two expert bodies were faced with this difficulty but they did not solve it. The Select Committee of the House of Commons in 1871, reported as follows:[2] "Your Committee have found that the evidence presented to them is, in some respects, wanting in precision, in consequence of the accounts in India not having been prepared in such a manner as to show the results which should be known to enable a judgment to be formed on important questions affecting the finances." The Committee asked for statements of accounts to be prepared on a uniform basis for their guidance, but I have not been able to find whether any such statements were submitted.

The Welby Commission on Indian Expenditure (1895-1900) met with the same difficulty. Mr. Stephen Jacob, Comptroller and Auditor-General to the Government of India said that it was not possible to make any fair comparison of the expenditure of the years before 1875, owing to a difference in the methods of keeping the accounts.[3] Sir Henry Waterfield, Financial Secretary to the India Office, submitted a series of tables to the Commission, which began with the year 1875, and which had been recast in the form adopted in 1886.[4] The majority of the Commission took the year 1861 as the basis of comparison, only so far as the *total* sums of revenue and expenditure in that year were concerned. But they said that "changes which have been made in the classification of expenditure do not enable us to analyse the progress of expenditure in its details beyond the year 1875."[5] The minority based their report entirely on figures beginning from 1875.[6]

Coming to more recent years, we find some changes in classification or in the form in which the accounts are presented, but they do not involve any great difficulty for the purposes of a comparative study.

Unit of Accounts. The more serious cause of trouble, however, is the adoption of an unnatural unit of account. Though

[2] Report, para 5.
[3] Questions, 4199—4208.
[4] Vol. II. app. 9, pp 59—79.
[5] Para 95, Majority Report.
[6] Para 41, Minority Report.

the English sovereign has been declared legal tender in India since 1899, in all monetary transactions the people of India think in rupees. The private income and expenditure of individuals is measured in rupees; the Government of India receives its revenue in rupees, because taxes are paid in rupees and its expenditure in India is also incurred in rupees. In spite of this, the financial statistics of India are presented to the world in pounds sterling. The fact that a certain amount of expenditure is incurred in pounds sterling in England on behalf of the Government of India is not a sufficient reason by itself to explain the origin of the adoption of the pound sterling as the unit of Indian accounts Perhaps the English officials who managed the finances of India found the pound sterling more convenient; or the fact that Indian financial statements were to be formally presented to Parliament might have led to this practice.

Two consequences arose from this. (1) The detailed accounts in India were of course kept in rupees and even in published statements rupees had to be spoken of in some cases. This led to the use of two different systems of notation, the Indian and the English: on the one hand we had *lakhs* and *crores* of rupees, on the other we had *millions* of pounds.[7] It is only after a long practice that one can follow without confusion important figures presented in two different units and two different notations, in the same statement.

(2) The other and more serious consequence arose from the difficulty of converting rupees into pounds or vice versa, when the rupee-sterling exchange was not steady. On account of the falling value of silver, the rupee-sterling exchange began to fall from the old parity of 2 shillings a rupee from 1873, and

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[7] Lakh means 1,00,000.
Crore means 1,00,00,000.
Million means 1,000,000.

The confusion takes another form sometimes; e. g., *Financial Statistics of British India, 1922*, page 20, where the number of coins struck in Indian mints is given in *millions* (623,451,000), and their value is given in *crores* of rupees (40,22,45,000)

Sometimes Indian gentlemen educated in England speak of *millions* of *rupees*.

remained fluctuating till the mints were closed in 1893, and exchange was established at the new parity of 1s. 4d. in 1898. Fluctuations opposite in character and greater in intensity began from 1917, the exchange rate having on the one hand risen by successive stages as high as 2s. 11d. in early 1920, and again fallen to about 1s. 4d. within a year thereafter.

It would obviously introduce endless confusion in the accounts of the Government of India if they tried to adjust the value of their unit of account with such market fluctuations from time to time. They therefore adopt a fixed ratio between the rupee and sterling for the purposes of their accounts, and the market rate of exchange is adjusted in a separate item called " Exchange". When this variation is small, this item serves its purpose fairly well, but when the variation becomes large it loses its value, and an element of unreality is introduced in the financial statistics of India. For example, the account rate was 2s. a rupee from 1873 to 1898, whereas the market rate was much below this. Again, during 1917 to 1920, the account rate was 1s. 4d., whereas the market rate was rising by great strides. Since 1st April 1920, the account rate is again 2s., but the market rate has considerably fallen and is in the neighbourhood of 1s. 4d. In such cases, we have huge figures appearing against the item "loss or gain by exchange," which arises because the public accounts are kept on a ratio which is widely different from the prevailing market ratio between the rupee and the sterling, and hence is very often fictitious.

Before going into the details of this confusion, another feature of Indian finance arising from this cause may be mentioned. In times of fluctuating exchange, budget-making in India is reduced to speculation. The Finance Member, who presents his budget to the Legislature in March, does not know what the exchange rate will be during the course of the coming financial year beginning from the first of April, and his calculations and estimates frequently go wrong at the end of the year. At such times the Finance Member usually adopts what may be called the budget rate of exchange in order to estimate the probable loss or gain by exchange with reference to the fixed account rate. If the average market rate during the year in question fluctuates widely from the estimated budget rate, the Finance Member may find at the end of the year that there is a large unexpected deficit or surplus, as the case may be. So long as the Government of India has to incur a large amount of expenditure in a foreign currency, in sterling, this uncertainty in financial calculations in times of fluctuating exchange will remain, even if the unit of account be changed from the pound sterling to the rupee as has been done since April 1920. But the confusion and unreality of the accounts referred to above will be removed by the adoption of this natural unit of account. The extent of this confusion and unreality will be realised by a brief survey of the way in which the supposed loss or gain by exchange was treated on different occasions in the past.

Exchange Loss during 1875 to 1898. With the fall in the value of silver which began in 1873, and the consequent fall in the exchange value of the rupee the Government of India required more rupees than before to pay for their sterling charges in England. The difference between the actual number of rupees paid by the Government in any particular year, and the number of rupees which would have been required if the exchange value of the rupee had remained at the conventional rate of 2 s. was considered to be the "Loss by Exchange" to the Government of India. At first, this so called loss was not shown against each different item of expenditure, but lumped in a separate item by itself, and the financial statistics of India continued to be presented in the pound sterling which up to 1885 was supposed to represent ten rupees. To illustrate, let us suppose that the military expenditure of India in 1885 was 10 crores of rupees in India and 5 million pounds in England. Converted at the 2 s. rate, the military expenditure of India would be shown as 15 million pounds, which nominally represented 15 crores of rupees. But if the exchange rate in 1885 was 1 s. 6 d., the number of rupees required to pay the sterling charge would be 6⅔ crores of rupees, and the total actual expenditure would amount to 16⅔ crores of rupees. The difference between the two, 1⅔ crores of rupees, would go to swell the item "loss by exchange", and the reader would be left with the impression that the military expenditure in that year was only 15 crores of rupees.

In order to remove this confusion the following method was adopted in the accounts of the Government of India from 1886. Each item of revenue or expenditure was divided into four columns. The first column showed the rupee transactions in India in tens of rupees (for which the symbol Rx. was used). The second column showed the sterling transactions in England in pounds sterling. The third column was called "Exchange," and it showed the addition required to the sterling figures in order to convert them into tens of rupees. This addition was the difference between the rupee equivalent of the sterling at the average rate obtained for Council Bills, and at the conventional rate of 2 s. a rupee. The fourth column gave a total of the first three columns, and showed the total rupee and sterling transactions in tens of rupee. It was thus intended to give the rupee and sterling transactions separately in tens of rupees and in sterling, and to show their combined result in tens of rupees. At the same time, it was easy to find the rupee equivalent of the sterling transactions by adding together the second and third columns.[8]

Though this method was adopted for the first time in 1886, the accounts of the previous ten years were recast on this model and published in an appendix to the financial statement for 1886.

This system was continued till 1898 when the rupee was stabilised at 1 s. 4 d., and it was therefore no longer necessary to present the accounts in this complicated manner. For the years 1875 to 1898 we have the financial statistics of India on this uniform basis.

Gain or Loss by Exchange in recent years. From 1899, the statistics were again given in pounds sterling which now denoted fifteen rupees. The uniformity of the accounts was again disturbed when in 1917, the fluctuations in exchange began. Compared with the fixed rate of 1 s. 4 d., the exchange value of the rupee was rising, and hence the consequences were quite the reverse of those that took place during 1875-98. Unlike this period, however, when the characteristic of the exchange rate was a steady

[8] E. g Budget, 1898.

	India	England	Exchange	Total
Army, Rx	18,083,800	£ 4,469,300.	Rx. 2,502,800	Rx. 25,055,900.

fall, in recent years the fluctuations have been greater in intensity in either direction. The rate after having risen as high as 2s. 11d. a rupee, has again fallen to the old level of 1s. 4d. in a single year.

Not anticipating the recent fall, the India authorities adopted the two shilling rate as the new legal ratio between the rupee and sterling, and the accounts are kept on this new basis since the first of April 1920. During 1917-1919, the Government of India realised a "gain by exchange" because the prevailing market rate was higher than the account rate (1 s. 4 d.). At the time of making the Budget Estimates for 1920-21, the market rate was much above 2 s., which was now adopted as the account rate, and hence a substantial "gain by exchange" was expected for 1920-21. Because of the sudden fall in the rupee thereafter, and the continuance of the 2 s. rate for accounts purposes, we have huge losses by exchange since 1920.

The way in which these gains or losses have been treated in the accounts is so unsteady and artificial that a study of the war finance of India becomes a task of insuperable difficulty. Unlike the period 1875-98, there were other factors which introduced elements of confusion in recent years. Under ordinary circumstances, the "gain" or "loss by exchange" occurs on the remittances between England and India, chiefly to finance the Secretary of State for his sterling expenditure on behalf of India. During recent years, however, partly on account of the war, and partly on account of the currency policy of the Government we had many other remittance transactions, of which a list is given below,[9] which either involved a gain or a loss to the state. As this gain or loss, which was supposed to be due to the same phenomenon, namely, a rise or a fall in the exchange value of the rupee, went into huge sums amounting to several crores of rupees, the question of treating the net gain or net loss every year became a matter of great importance.

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[9] (1) Council Bills; (2) Reverse Councils; (3) rupee coinage; (4) postal and money order transactions; (5) recoveries from H. M.'s Government; (6) gold transactions; (7) realisation of sterling securities in Paper Currency Reserve; (8) cancellation of overbuying guarantee; (9) transactions on behalf of other governments; (10) transfers from Paper Currency and Gold Standard Reserves; (11) depreciation on revaluation of these Reserves; (12) miscellaneous transactions.

In 1917 and 1918, there was a "net gain by exchange" on all such remittance transactions and this was credited to revenue in a lump sum. The Budget Estimates of 1919 took credit for a "net gain" of 160 lakhs of rupees; in the Revised Estimates, however, the system of appropriating the "gain" was changed. Out of the "net gain" of 11,81 lakhs of rupees (Revised Estimates, 1919), it was decided to credit the Capital Account with 731 lakhs, and the balance, 450 lakhs, was kept apart in a suspense head for wiping out the deficiency in the Paper Currency Reserve due to revaluation of the securities and gold in that reserve at the new 2 s. rate. The Final Accounts of 1919 are given in rupees converted at the rate of 10 rupees to a pound which makes it difficult to compare the figures with those given for the Budget and Revised Estimates, in which the old rate of 15 rupees to a pound was employed. This change explains the existence of an item in the Accounts of 1919, called, "Adjustment on account of the difference in exchange due to the adoption of 2 s. basis for conversion: 10,89 lakhs of rupees." This is different from the "gain by exchange" referred to above, which was appropriated to Capital Account and suspense head as explained above, the final figure in the suspense head being 523 lakhs of rupees.

The Budget Estimates for 1920 were presented in pounds sterling at the rate of 15 rupees to a pound, and the "net gain by exchange" was expected to be as much as 30,85 lakhs of rupees, out of which 600 lakhs were to be credited to revenue, 12,85 to Capital Account, and 12,00 to suspense head. From 1st April 1920, however, accounts have been kept in rupees on the 2 s. basis. The rate soon fell below this, and we have, therefore, a "loss by exchange". Instead of the budgeted gain of 30 crores of rupees in 1920, we have an estimated loss of an equal amount in the Revised Estimates.

From this time a new procedure was adopted for adjustment of exchange gain or loss. This was to be recorded in the first instance under a suspense head. The portion attributable to revenue and capital accounts was to be transferred to them. The balance was to be written off to revenue or kept in suspense head according to the financial condition of the year in question.

The portion which was to be debited to the Revenue Account was not to be distributed under each separate item of expenditure as might be expected. It was divided into three parts: (1) that due to commercial services which was mixed up with the expenditure under Railways, Irrigation, etc; (2) that due to Provincial Governments which was transferred to the Provincial accounts; (3) the balance was shown in a lump figure against "Exchange". This last item amounted to 323 lakhs in the Accounts of 1920.

The same method was followed in connection with the Budget and revised Estimates of 1921, and the Budget Estimates of 1922, the figures against the expenditure item "Exchange" being 328 lakhs (Budget 1921); 850 lakhs (Revised 1921); and 996 lakhs (Budget 1922).

It may be noted at this stage that, like the Select Committee of the House of Commons of 1871, and the Welby Commission of 1895-1900, the Inchcape Committee on Indian Retrenchment reporting as recently as March 1923 found the existing method of compiling the accounts confusing and suggested a new procedure in the following words: "We consider that the best course would be to show all English expenditure in sterling both in the estimates and in the accounts. The rupee equivalents should be shown in parallel columns and the sterling payments should be converted in the budget estimates at the assumed rate of exchange, and in the accounts prepared at the end of the year at the actual or average rate prevailing during the year. If this course were followed the separate entry under the exchange head would disappear from future estimates and accounts and the estimated and actual expenditure in rupees would be shown in both."

Though this recommendation has not been fully adopted, since March 1923 the natural system of distributing the loss or gain by exchange relating to the revenue account over the individual heads of revenue and expenditure concerned, both commercial and non-commercial, has been introduced. The former method of keeping a suspense head for exchange on all remittances transactions is retained. In connection with the Budget Estimates for 1923, we have as usual, the Accounts and the Revised Estimates of 1921 and 1922 respectively, and these are also recast on the new system. We have now figures in four columns against each head of revenue or expenditure: (1) showing rupee transactions in rupees in India ; (2) showing sterling transactions in England in rupees converted at the rate of ten rupees to a pound ; (3) showing in rupees the adjustment due to the variation in the actual exchange rate compared with the account rate ; and (4) showing in rupees the total of the first three columns. This system is similar to that adopted in 1886, with this difference that whereas an artificial unit Rx. (meaning 10 rupees) was adopted in that year, now we have the figures presented in the natural unit in ordinary rupees. The rate of converting sterling into rupees, namely 10 rupees to a pound, which is quite fictitious in view of the prevailing market rate, is however retained.

Suggested Remedies. This brief survey is enough to show the immense difficulties in making a comparative and historical study of Indian finance since 1860. The heroic remedy of recasting the financial figures of all these years on a uniform basis and in rupees is open only to the Finance Department of the Government of India. Though somewhat less satisfactory than this, there is another remedy, which it is within our power to attempt, and which eminently serves the purposes of study referred to above. It is to divide Indian financial statistics into several periods, in such a way that each period may have uniform and comparable figures and may be marked by certain common features. Accordingly, the following division seems to be the most natural one:

First period........	1861-1874	Unit £ (ten rupees)
Second period......	1875-1898	Unit Rx. (ten rupees)
Third period......	1899-1913	Unit £ (fifteen rupees)
Fourth period......	1914 1920	Unit £ up to 1918 („)
		Unit Rs. in 1919 and 1920.
Fifth period......	1921-	Unit Rs.

As already explained, in 1886, a new method of presenting Indian financial figures was adopted, and the corresponding figures from 1875 were recast on that basis. This system remained in vogue up to 1898 when the rupee was stabilised at 1 s. 4 d. The period 1875-1898 for which we have uniform figures in this way, and which is marked by the falling value of the rupee, thus clearly stands by itself.

Complaints on the part of important committees about the figures before 1875 have been already referred to. The want of uniformity in the accounts in the years before 1875 is, however, removed by two tables printed along with the Financial Statement for 1876, in which the gross and net figures for the years 1861-1874 are given on one common basis. Though there is no outstanding feature common to this period, it was during these years that our financial machinery was being organised. Figures before 1861, and particularly those of 1860, which were greatly affected by the Mutiny, must be kept separate from this period, though for the sake of comparison they may be given in certain more important cases.

From 1899 to 1917 the figures are not difficult to follow: there are no great changes in classification, and the unit, though it is the pound sterling, does not fluctuate greatly from the fixed ratio of 1 to 15. As in all countries, the War introduces an important landmark in our financial history, and it is better therefore to stop at 1913, and treat the years from 1914 separately. This explains the reasons for taking the years 1899-1913 as making our third period. The common feature during these years was that, but for the great famines in the early years of this period, these were years of surpluses and remission of taxation; besides, it was during this period that the chief feature of the Indian currency mechanism, the Gold Exchange Standard, was developed.

Though the War came to an end in 1918, its effects on Indian finance are more marked in the years that follow. The year when the deficits due to the War come to an end should properly speaking be the closing year of the period beginning with 1914. However much we may desire to do so, we have to stop at 1920 because of the fact that a new landmark begins in Indian finance, as in Indian politics, from 1921. With the inauguration of the Reforms in 1921, we have what is known as Provincial autonomy, and the financial transactions of the Provinces are now completely separated from those of the Central Government. Before 1921, though the Provinces enjoyed a certain measure of independence in their financial administration, the Budgets and Accounts of the Government of India showed the financial condition of British India as a whole. Since 1921 the Central finances deal only with those functions which are left to the Central Government. In many cases, therefore, it is not possible to compare the financial figures of the years beginning from 1921, with those of the proceeding years; unless we take note of the Budgets and Accounts of each of the Provincial Governments. This explains the reasons why we prefer to take the years 1914-1920 as our fourth period.

Unfortunately for us the figures in this period are not on a uniform basis, and because of the fluctuating value of the rupee since 1917 present great difficulties. The figures are given in pounds sterling up to March 1920, when the Budget Estimates for 1920-1921 were presented. From the first of April 1920, the rupee has been adopted as the unit of accounts. The Final Accounts for 1919 and 1920 are available in rupees, whereas those for 1914-1918 are in pounds sterling, which is supposed to be equal to fifteen rupees, though during 1917 and 1918 the pound fetched a smaller number of rupees. To avoid this difficulty, it would be better to convert the figures for the period 1914-1918 into rupees at the rate adopted in the accounts. Though this will enable us to have a clear and comparative idea of Indian Finance during the war period, the unreality introduced into the figures by the unsteady and artificial treatment of gain or loss by exchange in these years will remain as explained above. This cannot be removed unless the gain or loss for each item of revenue and expenditure were available, which is not the case.

Though a similar confusion prevailed in the Budgets of 1921 and 1922, along with the Budget for 1923, we have the figures from 1921 given in rupees, with the exchange gain or loss shown separately for each item. Besides, there is a new classification due to the Reforms, as explained above. Thus the fifth period may be said to begin from 1921. Evidently the closing date for this period is yet to come.[10]

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[10] The present writer has under preparation a series of tables giving the financial statistics of India on the plan suggested above. Criticism from those interested in the subject regarding this plan will be very carefully considered before publishing these tables.

REVIEWS OF BOOKS
RELATING TO INDIA

Labour in India—A study of the Conditions of Indian Women in Modern Industry. BY JANET HARVEY KELMAN. London: George Allen & Unwin Ltd. 1923. Pp. 281. 10s. 6d. net.

This publication is the outcome of a visit to India with a view to study the effect of modern conditions of industry on women. It was found, however, that apart from the difficulties of securing accurate information for a sectional study, the conditions of man's and woman' s work were so intimately connected that a wider survey was necessitated.

The work opens with an attempt to give a "background" to the study, by portraying the rural conditions into which modern industrial methods have penetrated. There follows a chapter on the coming of modern industry. Here one would have expected the author to proceed to her main theme, viz., labour in Industry. Instead, much space is devoted to detailed descriptions of the cultivation and the processes of manufacture of cotton and jute. While such an account would doubtless interest the reader unacquainted with Indian conditions, it might well have been relegated to an Appendix.

The author divides her main study under the following heads: Industrial Migration, Management and Supply of Labour, Wages and Methods of Payment, Conditions within Mills, Housing, Health, Standards of Living, Legislation, Trade Unions and Co operation. The chapters, however, are of uneven merit. In some the subject matter is not only common knowledge to economists in India but is treated in a vague and general manner. In others, (e. g., in the chapters on "Methods of Payment" and "Conditions within Mills") much useful material is given which throws fresh light on the conditions of employment of Indian workers.

The work as a contribution to Indian economic literature suffers from two defects. In the first place, the study has been made from the point of view of the social worker and missionary, rather than the economist ; consequently in the chapter on "Wages" we are given vague and general statements instead of detailed statistics of wages actually paid. Secondly, it is the outcome of a limited residence (some sixteen months) in India. Hence we find at times a lack of perspective and even inaccurate statements (e. g., on p. 136 the author writes about Hindus and Moslems as two "nationalities"). The book, has, however, a redeeming feature in so far as it is written in a refreshing manner which holds the reader's attention. This is largely due to the inclusion of the accounts of interesting episodes which have occurred on the occasion of the writer's interviews with employers and employees ; such incidents give added interest to a work which should find a place on the bookshelf of all interested in social reform in India.

A. R. BURNETT-HURST.

REVIEWS OF BOOKS

ENGLISH AND FOREIGN

A Tract on Monetary Reform. By JOHN MAYNARD KEYNES. London: Macmillan & Co. Pp. viii, 209. Price: 7s. 6d.

In a very brief Preface to the above book the author points out that "unemployment, the precarious life of the worker, the disappointment of expectation, the sudden loss of savings, the excessive windfalls to individuals, the speculator, the profiteer—all proceed, in large measure, from the instability of the standard of value,' and it is to suggest methods to eliminate this instability that the first two chapters are devoted to evils proceeding from instability in the purchasing power of money and the part played by the exigencies of Public Finance are indicated; in the third chapter an attempt has been made to lay a foundation of theory upon which the author has based his proposals for monetary reform, and in the fourth chapter the author discusses the choice between the alternative aims, first, do we wish to fix the standard of value near its existing value ? or do we wish to restore it to the pre war value ? that is, a choice is made between deflation and devaluation. After referring briefly to the evils of deflation, the author unhesitatingly favours the fixing of the standard of value near its existing value. As between the other alternatives of the stability of prices, and the stability of exchange, the author suggests that "the right choice is not necessarily the same for all countries. It must partly depend on the relative importance of foreign trade in the economic life of the country. Nevertheless, there does seem to be in almost every case a presumption in favour of the stability of prices, if only it can be achieved." And this because "stability of exchange is in the nature of a convenience which adds to the efficiency and prosperity of those who are engaged in foreign trade. Stability of prices on the other hand, is profoundly important for the avoidance of the various evils described in chapter I."

This brings us to the positive suggestions put forward by the author for the future regulation of money. He recommends that "an official index number" be "compiled of such a character as to register the price of a standard composite commodity- ", and "the authorities" should "adopt this composite commodity as their standard of value in the sense that they would employ all their resources to prevent a movement of its price index of the composite commodity by more than a certain percentage in either direction ? This is to be secured by adopting the post bellum practice of regulating the quantity of cash and credit in the country through the joint action of the Bank of England and the British Treasury.

That the scheme suggested by Mr. Keynes is eminently practicable will be clear when we recall that it is largely based on what has actually been done since the termination of the great war in the British Isles. But whether people in England can be persuaded to sacrifice their strong prejudice for an un-regulated, self-adjusting gold standard in favour of a "managed" "composite commodity standard," is a question, and we should think the most vital question in this connection. Mr. Keynes, however, does not believe that "the scientific treatment of currency questions (in England) is impossible and we wish a happy success to his scheme."

B. G. BHATNAGAR.

Population. By HAROLD WRIGHT. Cambridge: Nisbet & Co. Ltd. 1923. Pp. xiv, 178. Price: 5s.

This is the fifth book of the Cambridge Economic Handbooks Series and maintains the high standard set by the general editor of the series, Mr. J. M. Keynes.

Chapter I opens with a review of ideas on population of ancient and medieval thinkers of Europe. This review strongly supports the author's contention that "at times the tendency has been to err in the direction of mistaking the peculiar conditions of particular periods in the evolution of human society for the permanent and inevitable results of the working of economic laws. This tendency has always been very much in evidence with regard to questions about population."

Chapter II is headed Malthus, and here in we find a resume of the doctrine of population as enunciated by Malthus, and its applicability to modern conditions of life and labour in the western countries. The author's conclusion in these aspects may be stated as follows: "The tendency for population to outrun the means of subsistence is a potent fact in the life of humanity." But there is no reason now to take as gloomy a view of things as Malthus took, because "we have evidence today, of the kind that Malthus properly demanded, that there is a tendency for man deliberately to restrict the number of their children, with a view to maintaining a certain standard of well-being and happiness."

Chapter III opens with the question: "why had Malthus many disciples?" And an answer to this is again suggested in the peculiar economic condition of his times. "By degrees, however, England recovered its equilibrium and voices began to make themselves heard saying that there was, after all, no tendency to diminishing returns," and the doctrine of

Malthus was vehemently attacked by Senior Chalmers and the American economist Carey. However, the catastrophe which according to the author, "has befallen large sections of the population of Europe during the years immediately succeeding the war, is the tragedy of people being forced to lower their standard of living." And this according to Malthus, is the strongest evidence of populations pressing upon the means of subsistence. Is it " a temporary product of the great upheaval, from which a recovery may be expected when the statesmen have at last put their houses in order ? Or has the war merely accelerated an inevitable decline in European prosperity ; the result of changing ratio of raw products and manufactured goods ? Are we witnessing a world wide manifestation of the tendency to diminishing returns ?" In the remaining six chapters the author has studied the factors "which must be taken into account in answering these questions."

The author's survey of the factors that bear upon the population problem is at once exhaustive and extensive as it takes into consideration facts as they are in almost all the important countries of the world, including India. And the conclusion to which he has come may well be put in his own words: "The population problem which Malthus, Ricardo, and John Stuart Mill first revealed to thoughtful people in this country, remains unsolved; and it may indeed be expected to grow more acute unless its importance is widely recognised and its implications are allowed to modify the habits of modern civilisation as they appear to have modified those of primitive society."

B. G. BHATNAGAR.

CURRENT NOTES

OURSELVES

For two years the Indian Economic Association and the Department of Economics of the University of Allahabad have been conducting negotiations regarding the *Indian Journal of Economics.* These negotiations seem now to be approaching a satisfactory conclusion in an agreement whereby the *Indian Journal of Economics* becomes the organ of the Indian Economic Association though it will continue to be published by the Department of Economics of the University of Allahabad. The Indian Economic Association will, under these plans, appoint the majority of members of the Editorial Board, but the Department of Economics of the University of Allahabad will continue to bear the financial responsibility of carrying on the Journal. We hope that this agreement will have been concluded before our next issue, subject to the approval of the next annual meeting of the Indian Economic Association.

ECONOMIC LEGISLATION

The proposals of the Tariff Board according a moderate scale of protective duties in favour of the Indian steel industry were duly enacted into law by the Imperial Legislature at its special session in Simla. While we recognize that the problem of a protective tariff is a very controversial one, even in economic theory, and while we are, generally speaking, inclined to favour a policy of free trade, we believe that under existing circumstances in India the law as passed is probably a wise measure. The reports of the Tariff Board upon other industries and the newspaper summaries of the proceedings of the Tariff Board, as well as the report upon protection of the steel industry, show that the Board is performing its duties well, both in regard to the general policy of protection and to its application to the specific industries which have been investigated.

In the discussion of the steel protection bill in the Legislative Assembly much concern was expressed regarding the conditions of work and of life among industrial labourers, especially in view of the stimulus to industrial development which it was expected would ensue upon the adoption of a policy of protective tariffs. As a matter of fact, the evils of industrial development which have shown themselves so prominently in western countries and in Bombay and Calcutta and to some extent in other Indian cities are largely connected with insufficient housing or due to a lack of attention to housing conditions. It ought to be possible for India to learn from the experience of western countries and to avoid any further extension of the terrible overcrowding which already exists in Bombay and Calcutta.

The solution of the housing problem is no easy one, but we believe a proper city-planning scheme would contribute much toward a solution. Our suggestion would be that a city-planning section or board be established in the Department of Industries and Labour, and that a law be passed requiring municipalities having over fifty thousand population to institute city-planning commissions, and that no factories employing more than three hundred persons could be established in such cities until the city-planning commission had reported to the Department of Industries and Labour that arrangements were made for suitable housing accomodation. Power to lay down regulations concerning the kind of arrangements considered suitable could be given to the Department of Industries and Labour. Under this plan entire freedom would be left concerning the nature of construction and ownership of workmen's houses, whether by the factory owners, the city, private capitalists, or the workers themselves. It is possible, of course, that this might slow down very slightly the process of industrialization, but if so, we believe that such a retardation of industrialization would be in the end beneficial. It would make possible the industrialization of India without the great housing evils which have in the past usually accompanied such industrialization.

C. A. W.

RECENT PERIODICALS

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MARCH 1924

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Foreign Trade and Shipbuilding. By R. Y. SANDERS.
Wholesale Prices of Commodities in 1923.

BANKERS' MAGAZINE

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Changes in the Price Level of Individual Commodities.

APRIL 1924

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THE ECONOMIC JOURNAL

MARCH 1924.

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- *Marketing.*

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RECENT PERIODICALS

INDIAN

THE MYSORE ECONOMIC JOURNAL

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LABOUR GAZETTE

APRIL 1924

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Wages in Agriculture in the Bombay Presidency.

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Separation of Railway Budget. By RAI SAHEB CHANDRIKA PRASADA

BOOKS RECEIVED

Democracy and Labour. By F. J. C. HEARNSHAW. London: Macmillan & Co. 1924. Pp. xvii, 214. Price: 10s. 6d.

The System of Financial Administration in British India. By P. K. WATTAL. Bombay: Times of India. 1923. Pp. xv, 412. Price: Rs. 10.

Lectures on the Economic Condition of Ancient India. By J. N. SAMADDAR. Calcutta: University of Calcutta. 1922. Pp. xv, 165.

Factory Administration and Cost Accounts. By EDWARD T. ELBOURNE. London: Longmans, Green & Co. 1921. Pp. xx, 811. Price: 45s.

Payment by Results. By J. E. POWELL. London: Longmans, Green & Co. 1924. Pp. viii, 411. Price: 21s.

Currency and Credit. By R. G. HAWTERY. London: Longmans, Green & Co. 1923. Pp. viii, 442. Price: 15s.

Organised Produce Markets. By JOHN GEORGE SMITH. London: Longmans, Green & Co. 1922. Pp. ix, 238. Price: 12s. 6d.

Monetary Reconstruction. By R. G. HAWTREY. London: Longmans, Green & Co. 1923. Pp. vi, 147. Price: 9s.

Handbook of Commercial Geography. By GEO. G. CHISHOLM. London: Longmans, Green & Co. 1922. Pp. xv, 824. Price: 25s.

A History of Commerce. By CLIVE DAY. London: Longmans, Green & Co. 1923. Pp. x, 676. Price: 14s.

Economics for Commercial Students. By ALBERT CREW. London: Jordan & Sons Ltd. 1923. Pp. xvi, 422, 8. Price: 5s.

Public and Company Meetings. By ALBERT CREW. London: Jordan & Sons Ltd. 1924. Pp. xxxi, 330. Price: 5s.

How to Form a Company. By HERBERT W. JORDAN. London: Jordan & Sons Ltd. 1924. Pp. viii, 103, xxxi. Price: 1s. 6d.

Private Companies. By HERBERT W. JORDAN. London: Jordan & Sons Ltd. 1924. Pp. vi, 65, xxxi. Price: 1s. 6d.

The Rubber Position and Government Control. By A. PHILLIPSON. London: P. S. King & Sons, Ltd. 1924. Pp. 100. Price: 3s. 6d.

The Problem of the Rupee, Its Origin and its Solution. By B. R. AMBEDKAR. London: P. S. King & Sons, Ltd. 1923. Pp. xv, 309. Price: 15s.

Labour in Indian Industries. By G. M. BROUGHTON. Calcutta: Oxford University Press. 1924. Pp. 214. Price: Rs. 6.

The Principles of Industrial Welfare. By JOHN LEE. London: Sir Isaac Pitman & Sons, Ltd. 1924. Pp. 93, 14. Price: 5s.

The Problem of Population. By HAROLD COX. London: Jonathan Cape. 1922. Pp. 198. Price: 6s.

The Control of Industry. By D. H. ROBERTSON. London: Nisbet & Co. Ltd. 1923. Pp. x, 169. Price: 5s.

Economic Problems of Democracy. By ARTHUR TWINING HADLEY. Cambridge: University Press. 1923. Pp. 160. Price: 6s.

Behind and Before. By W E. HEITLAND. Cambridge: University Press. 1924. Pp. xv, 166. Price: 6s.

Life and Labour in the Nineteenth Century. By C. R. FAY. Cambridge: University Press. 1920. Pp. viii, 319. Price: 20s.

The Economic Development of France and Germany 1815-1914. By J. H. CLAPHAM. Cambridge: University Press. 1923. Pp. vii, 420. Price: 16s.

Excise and Liquor Control. By JOHN MATTHAI. Madras: The Authors' Press & Publishing House. 1924. Pp. 89. Price: one rupee.

BOOKS RECEIVED

Labour and the Industrial Revolution. By E. C. FAIRCHILD. London: George Allen & Unwin. 1923. Pp. 219. Price: 5s.

Commercial Geography. By J. F. UNSTEAD and E. G. R. TAYLOR. London: George Philip & Son. 1922. Pp. 239. Price: 4s.

Wealth and Work. By GEORGE W. GOUGH. London: George Philip & Son. 1921. Pp. 260. Price: 6s.

Economic Essays. By DAVID RICARDO. Edited with Introductory Essay and Notes by E. C. K. Gonner. London: G. Bell and Sons. 1923. Pp. xxxvi, 315. Price: 6s.

Getting Our Living. By GERALD FIENNES and L. G. PILKINGTON. London: G. Bell & Sons. 1924. Pp. 149. Price: 1s. 6d.

The Economics of Unemployment. By J. A. HOBSON. London: George Allen & Unwin. 1922. Pp. 157. Price: 4s. 0d.

Stabilisation. By E. M. H. LLOYD. London: George Allen & Unwin. 1923. Pp. 128. Price: 4s. 6d.

The Acquisitive Society. By R. H. TAWNEY. London: G. Bell and Sons. 1923. Pp. 242. Price: 4s. 6d.

England in Her Days of Peace. By ELEANOR DOORLY. London: George Philip & Son. Pp. 254. Price: 3s. 6d.

The Wealth of Nations. By ADAM SMITH. Reprinted from the sixth edition. London: G. Bell & Sons. 1921. 2 Vols. Pp. xxxvi, 502, 552. Price: 12s.

India at the Death of Akbar. By W. H. MORELAND. London: Macmillan & Co. 1920. Pp. 328. Price: 12s.

From Akbar to Aurangzeb. By W. H. MORELAND. London: Macmillan & Co. 1923. Pp. 364. Price: 15s.

Report on an Enquiry into Agricultural Wages in the Bombay Presidency. By G. FINDLAY SHIRRAS. Bombay: Government Central Press. 1924. Pp. 152. Price: Rs. 2–9–0.

Essentials of Economics. By F. R. FAIRCHILD. New York: American Book Company. 1923. Pp. 543.

Sociology and Modern Social Problems. By A. ELLWOOD. New York: American Book Company. 1919. Pp. 416.

Essays on The Taxation of Unearned Incomes. By HARRY GUNNISON BROWN. Columbia: Missouri Book Company. 1921. Pp. 124.

Art Principles in House, Furniture, and Village Building. By ARTHUR BRIDGMAN CLARK. California: Stanford University Press. 1921. Pp. 131.

The German Revolution 1918-1919. By RALPH HASWELL LUTZ. Vol. I. California: Stanford University. 1922. Pp. 188. Price: $ 2.00.

Stale Bread Loss as a Problem of the Baking Industry. By JOSEPH STANCLIFFE DAVIES and WILFRED ELDRED. California: Stanford University. 1923. Pp. 70. Price: 50 cents.

The Mathematical Ground-work of Economics. By A. L. BOWLEY. Oxford: Clarendon Press. 1924. Pp. 98. Price: 7s.

The American Livestock and Meat Industry. By RUDOLF A. CLEMEN, M. A. New York: The Ronald Press Company. 1923. Pp. 872. Price: $ 6.00

The Federal Reserve System. By HENRY PARKER WILLIS. New York: The Ronald Press Company. 1923. Pp. xiv, 1765.

Principles of Economics. By F. M. TAYLOR. New York: The Ronald Press Company. 1923. Pp. ix, 587.

Cooperative Democracy. By JAMES P. WARBASSE. New York: The Macmillan Company. 1923. Pp. xx, 493.

The Business of Selling. By HAROLD WHITEHEAD. New York: American Book Company. 1923. Pp. 247.

Junior Business Training. By FREDERICK G. NICHOLS. New York: American Book Company. 1923. Pp. 233.

Modern Business Mathematics. By G. H. VAN TUYL. New York: American Book Company. 1923. Pp. 303.

Social Problems and Social Policy. By JAMES FORD. New York. Ginn and Company. 1923. Pp. 1027.

Elementary Economics. By T. N. CARVER. New York. Ginn and Company. 1920. Pp. 397.

The A B C of The Federal Reserve System. By E. W. KEMMERER. Princeton: Princeton University Press. 1924. Pp. 215. Price: $ 1. 50.

High Prices and Deflation. By E. W. KEMMERER. Princeton. Princeton University Press. 1921. Pp. 86. Price $ 1.25.

10 Pamphlets from the Trade Union National Educational League, Chicago.

French Public Finance in the Great War and Today. By HARVEY E. FISK. New York: Bankers Trust Company. 1922. Pp. 363.

English Public Finance. By HARVEY E. FISK. New York: Bankers Trust Company. 1920. Pp. 241.

Our Public Debt. By HARVEY E. FISK. New York: Bankers Trust Company. 1919. Pp. 126.

The Inter-Ally War Debts. By HARVEY E. FISK. New York: Bankers Trust Company. 1924. Pp. 367.

America's Merchant Marine. New York: Bankers Trust Company. 1920. Pp. 257.

The Flow of Capital—Canada. By HARVEY E. FISK. New York: Bankers Trust Company. 1923. Pp. 15.

Proceedings of the 7th Indian Economic Conference. Bombay: Indian Economic Association. 1924. Pp. 201. Price: Rs. 2-0.

Report of the Cooperative Societies in Mysore for the year 1922-23. Government Press. Bangalore: Pp. 39.

3 Pamphlets from the Cooperative League of America. New York: 1920.

Report of the Local Government Department for the year ended 30th June, 1923. Sydney: Government Printing. 1924. Pp. 64. Price: 4s. 3d.

Illustrated Souvenir of the Electrical and Allied Engineering Section of the British Empire Exhibition. The British Electrical & Maunfacturers Association. (Inc.) 1924. Pp. 200. Price: 2s. 6d.

Guide to the Agricultural Exhibition in Gallery II of the Government Pavilion. London: Fleeting Press Ltd. Pp. 66. Price: 6d.

Some Problems in Current Economics. By M. C. RORTY. Chicago: A. W.- Shaw Company. 1923. Pp. 143.

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Vol. V—Part 2

BORDERLANDS OF ECONOMICS

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THE SOCIO-PHYSIOLOGICAL FOUNDATION

There are many strands of thought brought to light by recent scientific developments which are weaving for us a new system in economics. In the first place, the physical and chemical investigations in the physiological domain are revealing a new measure of value in terms of vital energy and capacity, though the psycho-physical parallelism must not be carried too far. The researches of Sherrington, Bianchi,[1] and other neuro-biologists have shown a continuity of biological, nervous and psychic equivalents in the evolution of the brain and nervous system of organisms, and explain consciousness as a series of excitations of adaptive response to the stimuli of the external world. The continuous chemico-dynamic processes, the perennial action of the stimuli, generate in man, who is the most complex and perfect morphological machine, the sense of life. This is but the reflex on the threshold of consciousness of all the inner work of the busy organic laboratories and of the incessant stimuli by which the outer world in which he lives reveals itself to him. According to Bianchi, it is from the *tout ensemble* of the chemico-physical modifications that consciousness draws the elements of its first nucleus, and from the *tout ensemble* of these its *raison d'etre.* In the human subject it draws its elements more directly from the unconscious just as in the story of life the unconsciousness of the higher beings appears before us as the continuation of the physico-chemical reaction of the lower creatures. This suggests a revised, positivistic conception of value which is in keeping with the modern notion that consciousness represents the ebb and flow of chemical, vital and mental forces at ascending levels maintaining the balance of the organism in relation to the environment. The whole problem of efficiency of labour and consumption is, again, reviewed afresh from a metabolic view point. The racial food peculiarities and habits of consumption, which are adaptations to the climate, also throw important light on the family economy as well as on the systems of production with which dietaries and habits of consumption seem to be correlated in the evolutionary development of economic folk-ways. The scale of consumption is adapted to the geographical environment. The difference in climate affects the nature and quantity of food needed, while the amount of energy expenditure in work is also different in different climates. All this explains differences in diets of different peoples and in their wage levels. At this time, when an international bond unites the labour legislation of various countries, the study of regional economics with special reference to the limits of efficiency, the minimum food as well as habits of life and conditions of climate so far as they furnish comparable bases of the study of labour problems, becomes more necessary than ever. The historical school of economics has not as yet sought much aid from human geography and social anthropology. Economics ought now to include in its survey new fields of economic types and organisations connected with their ethnic variations in the diverse zones of cultural distribution. The emphasis of geographical and sociological factors as entering into economic standards will remedy the present disparity between economic theory and the institutions they seek to interpret, and will ground economic laws on the fundamental principles of biology and psychology in which the conflict of partial economic theories derived from specific social types will find its reconciliation.

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[1] Bianchi, *The Mechanism of the Brain*

Economic Behaviourism

In the second place, the more recent developments in psychology which have been in close association with developments in physiology and in biology are profoundly affecting the analysis of man's conduct and that of his fellows. For instance, the new psychology suggests for economics an objective interpretation of value hitherto treated all too abstractly. Instincts now appear as economic incentives and their role in the evolution of traditions, customs, and beliefs, which remake man and revaluate his values, is receiving increasing recognition. Out of the complex data of instincts in action, customs and beliefs selected by the elimination of undesirable responses and conscious choice which modifies the responses towards rationality, social behaviorism ultimately furnishes economics with distinguishable forms of human behaviour. These will satisfy within limits the test of objective measurement and will supply us standards of comparison more scientific than the unknown and uncertain human quantities into which utility and cost have been resolved by economics. At the same time, behaviorism shows the importance of many other original impulses which under particular circumstances operate as economic forces. The determination of their relative strength in recognisable measure opens up a new line of investigation to which the different sciences on the border land must contribute. This is necessary to make the abstract equations of demand and supply vital and fruitful; and will lead economic theory out of the blind alley into which it has strayed. The work of Woodworth, Watson, Thorndike, Parmalee, and others in analysing man's original nature and the common modes of individual behaviour is already contributing indirectly to build the scientific foundations of psychological economics. Parker, Mitchell, J. M. Clark, Tead and others have already given a sharply focussed view of the operations of instinctive and impulsive forces in economic life though they have not carried their analysis deep enough to supplant the psychological premises of orthodox economic theory.

THE UNCONSCIOUS IN ECONOMICS

Besides, functional psychology is emphasising certain demands of human nature which make untenable the treatment of price-economics as separate from welfare economics. Patten, Fetter, Veblen, and J. A. Hobson in particular have brought forcibly the welfare standpoint into economics and helped us now to go directly to the whole problem of industrial ideals which economics is after all under obligation to understand. Especially significant in this connection is the psychology of the unconscious, which reveals how in the present economic situation there is at work the disruptive force of emotions and interests not finding legitimate expression or satisfaction. Indeed, the adequate analysis and effective control of the pathological or near-pathological groups is now found to be an integral part of scientific economic thinking. We thus work hand in hand with Freud and his school, and with Jung and Rivers, though of course with a new social emphasis. Thus we supplement their treatment which deals mainly with the individual psychoses, by a study of the social situation and the factors of race and culture inheritance in the analysis of neuroses. The psychic distresses of the economic order are seen from the physiological and psychological standpoint as part of the wider problem of man's adaptation to the economic environment.

Here, again, the economic system, which is in reality a system of repression of natural instincts, manifests an analogue to the evolution of social life among insects and animals; social control and adaptation are often secured by ruthless inhibition and ultimately by physiological eradication of the powerful life impulses which cause individuation and operate against social harmony. We thus come back to natural science for guidance in the purposive direction of economic endeavour in social groups, inspired by constructive ideals to a due regulation of the primary emotions of love and sacrifice, sociability and co-operation. This implies a renovation of the effective side of man's nature, hitherto starved by an economic system which disintegrates personality by repressions. The disintegration of personality can only be cured by a full, varied and spontaneous expression in a healthy normal psyche which affirms and expands the energy of life. As a recent writer on the new psychology observes: "Just as the alchemist in the early days of science thought that they could transmute the baser metals into gold, so the philosophers have found that we can change the direction and object of the baser desires into higher ones having in them more gold—that is, more value—for the modern development of society."[2]

THE INSTITUTIONAL ADAPTATION

Besides the human adaptation to the economic environment by a balance between expression and repression or selection of instinctive tendencies, there is, as is increasingly recognised, the need of an institutional adaptation. For the changes which industrial development has effected in the institutions of mankind have not been wholly beneficial to the trend of the race. What Galton strove for and Nordau and later on Carpenter lamented, are now brought home to modern society by the experimental results and observations of Karl Pierson, Saleeby, Davenport, Newsholme and others. The studies by the psychiatrists of crime and delinquency, pauperism and vagrancy, mental defects and disease in relation to environmental conditions have shown the factors that undermine the biological foundations of civilisation, and have strengthened the modern resolve to improve the social environment and at the same time to maintain a high standard of racial efficiency endangered by modern industrial conditions. Social defeats and disasters, poverty, crime, insanity and all the other distressing social phenomena bring to the fore the dangers of institutional maladjustment. The dangers of excessive urbanisation, of the high pressure of living and, again, of occupational selection or the differential death rate among the employees of various industries all point towards the need of a eugenic policy, which in the long run will prove economically valuable.

These and other facts are now yielding themselves to statistical observation and verification and there is a growing body of scientific literature which shows the relations of social habit among different classes to conditions of health and progress. The emergence of the concrete, biological point of view is thus bringing about a unification of the problems of society and a re-orientation of economics with other social sciences; economic or social pathology has initiated close co-operation between the economist, the sociologist and the psychologist ; and the humanisation of economics has been rendered inevitable not only by the sciences of psycho-analysis and psychiatry but also by the whole modern pragmatic, anti-intellectualist tendency.

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[2] W. Lay, *Man's Unconscious Conflict.*

THE SOCIOLOGY OF THE REGION

In the psychological and humanistic sciences today the same tendency has replaced the belief in a fixed human nature by a view of organismic behaviour which reveals distinct human reactions under different stimulating circumstances. Stimuli are infinitely various, ranging from compulsions, impulsions and constraints to inducements and allurements. To quote Giddings: " Among stimuli that all living bodies react to are phenomena of the surface of the earth, including its life sustaining resources, and of the atmosphere, including variations of temperature and of precipitation. All these are unevenly distributed. Geography is a variegated thing. There are regions that forbid, repel, starve and kill and there are regions that nourish and attract. Therefore, the teeming life of the earth is apportioned and segregated, here in energetic aggregations, there in sporadic, ineffective examples according to the regional dispersion of environmental bounty and exaction, incitement and constraint." Huntington has shown that the law of optimum temperature apparently controls the phenomena of life from the lowest activity of protoplasm to the highest activities of the human intellect. A slight rise in temperature seems to be favourable, but beyond that the favourable effects of increased heat, which are strong in cold weather, are neutralised by the unfavourable effects in warm weather. The measurement of peoples' actual achievements under various climatic conditions has led to the conclusion that variations of temperature from day to day are much more important than has been realised. Therefore in the same latitude the stimulating effect of the climate may vary greatly. "The civilisation of the world varies almost precisely as we should expect if human energy were one of the essential conditions, and if energy were in large measure dependent upon climate."[3] Apart from climatic advantages or handicaps with which economic efficiency, industry, thrift and even great moral issues are bound up, the raw materials of production with the physical conditions surrounding them stand out in relief as the occasions for building up new reaction systems and for bringing them into operation. Studies in the mental characteristics of races from the standpoint of social psychology have been undertaken by Le Bon and others. McDougall has recently attempted to explain the cultural characteristics of the Nordic and Mediterranean races. Under the deliberate scrutiny of actual measurements racial differences in mental traits have been observed by Woodworth and Havelock Ellis. The study of racial temperament has also begun. Meanwhile the analysis of geographical and climatic influences as in the writings of Huntington, coming in the wake of Buckle, Montespuieu and Ratzel has been rendered concrete and exact by statistical observation and verification. There has not been, however, any adequate analysis of the formative forces in social and economic life in different races and climates from this standpoint, though without this an adequate classification of economic types or regions, so essential, as Steinmetz has shown, for the advance of the social sciences, is impossible. As the climate of many countries seems to be one of the great reasons why industry or idleness, strenuousness or weakness of will prevail, so the different crops and natural resources and the technological apparatus and the processes developed in the courses of their transformation directly and indirectly influence mental and social evolution, making and limiting the varied possibilities of well being and of economic development.

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[3] Huntington, *Climate and Civilisation*, page 219.

Secondly, regional influences evoke a similarity of responses, habits and feelings which are spread and strengthened by interstimulation, herd-reaction and gregariousness, securing the adaptations of the particular society to the environmental and genetic conditions. Instincts and habits fit the individual to the particular physical and social milieu; feeling and intelligence supervene and thus social habits, customs, institutions, standards, reflected upon by the herd, differentiate themselves as the social inheritance of a particular people, not less important for social life than the geographic environment. These are acquired, like other habits, through social intercourse and repeated practice. Beginning with the original equipment of instincts and feelings which secure man's adaptations in his early stages of evolution, there is a super-imposition, layer upon layer, of the intellectual elements compounded of the raw material of instinct, habit and feeling, beliefs, standards or ideals, spread by 'suggestion' (Sidis), 'imitation' (Tarde), and 'gregariousness' (Taide). All these preserve a cultural continuity which is a means of social survival and progress.

GROUPS AS VALUES

From the standpoint of psychology as the science of definite organismic reactions we expect of the peoples of the different cultural levels only such reactions as they have had an opportunity to build up in the specific surroundings in which they find themselves.[4] The common belief is that the human mind is perfected in the individual of European culture which must be considered as the standard by which to judge the minds of other peoples. But according to organismic psychology it is unscientific to think of the minds, morals and institutions of men in different cultures as representing stages in the development towards the unique and exalted conditions in life and thought of European individuals. Social behaviourism must recognise the role of deliberation and criticism which lead to the transmutation of instinctive tendencies, feelings and habits into ideals or values. This will correct the anti-intellectualism recently current in social psychology. Social values and cultural standards show the way in which man's original nature is altered by use. The common modes of individual and social behaviour that result become the common heritage of each society and acquire a survival value of their own over and above a people's original equipment in instincts and impulses. Thus the new psychological conception reveals differences in the mental capacities of the various human races, as well as in social and economic types, due to the development of different reaction systems by members of these races in different environmental and genetic conditions.

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[4] See Kantor, "An Essay towards Institutional conception of Social Psychology," *The American Journal of Sociology*, May 1922.

Attention must be drawn here to the line of social investigation undertaken by the school of Le Play. By laying stress upon the natural groupings in a certain geographical area and the different fundamental occupations which govern family types and social, religious or educational institutions as orderly organic developments, Le Play discovered the real living nucleus of the social organism. His prime contribution was his conception of the Valley Section and his detailed examination of physical and spiritual life of the great rustic types which are developed by the work of the forest, the pasture, the field and the ocean. Such a regional study and survey as Patrick Geddes has been conducting with a more graphic handling and concrete treatment of the inter-relations between Place, Work and Folk, is an attempt to carry further this occupational analysis of Le Play. In Geddes we find also a detailed analysis, and a juxtaposition of these formative factors of social life, so invaluable for him not merely in his diagnosis and solution of urban and industrial maladaptations but also in his task of synthesis, the reconcilement of hitherto aloof schools of thought with a renewed application of sociological methods to social life in definite cities and regions.

The analysis of group mind such as we had from Durkheim and recently from Cooley, McDougall, McIver and Miss Follett reveals a new mode of treatment of social habits and processes, which is leading social science much further than Le Play conceived. Inductive studies in the psychological conditions of industry and profession as seen, for instance, in certain new regional and industrial surveys and monographs, are also showing that psychological factors more than environmental conditions dominate the interplay of folk and region. The reciprocity of reaction between social stimuli and individual responses is now sufficiently recognised by modern writers on social psychology, who show that regional peculiarities are themselves remoulded by individuals acting in groups. The region is thus seen not as a fixed stock of social habits and traditions but a perennial flow of social life processes, with ever-recurring eddies of group formations. The local and the parochial can thus easily pass into the non-local and the universal, and there develops a hierarchy of values in the interfusion of which lies the reconciliation of the conflicting claims of rival types of group organisation.

The conceptions of social interdependence and solidarity which alone can reconcile the conflicting interests and claims of groups have recently found an expression in the new jural principles enunciated by Duguit, Roscoe Pound, and others. And, indeed, it is now emphasized by this school of French and American jurists that unless the present basis of law is grounded upon social justice and solidarity instead of the inviolability of private rights and individual contract, law will remain divorced from the social conscience.

The new jurisprudence, politics, ethics and psychology have alike laid stress upon the creative activity of the group. It is the group which recreates man and remoulds his interests and values. It is the group which gives rise in the economic field to class standards of consumption, to different kinds of occupational psychology, and to different species of nervous fatigue and occupation neuroses begotten by different forms of industrial vocation. Thus the group organisation of life and its scheme of satisfactions comes to dominate more and more the theories of production, consumption and distribution. The new schemes of economic reform are also yielding to the analysis of group wishes and suppressions, which furnish valuable suggestions showing how repressed desires now working along dangerous paths in society can be disciplined or diverted into useful channels of social integration. An attempt in this direction is now being made by Kolnai[5] and others who are discovering the hidden psychical springs of recent revolutionary outbursts. To some psycho-analysts, who cannot avoid the temptation to regard all social activity as the functioning of a great unconscious, these are instances either of reversion or repression. Indeed, the two interpretations seem now to owe their allegiance respectively to the bourgeouise and the proletariat attitudes towards law and order in society. It appears that group standards often emphasise social neuroses as being the precipitation of pathological conditions arising out of both human and institutional maladaptation, though this has not been sufficiently realised by the psycho-pathologists who have confined themselves mainly to the individual psyche. A very large part of economic thinking and social programmes are in reality products of the repressions in the home, in the industrial organisation and in the community, of dynamic unconscious impulses of human nature. A return to work and the joy of work, to sanity and creativeness, to love of nature and man, alone can cure a social neurasthenia, which is now stamped on modern social thought and prevents us from seeing the truth.

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[5] Kolnai, *Psychoanalysis and Sociology.*

THE NEW HUMANISM

There is thus everywhere a yearning for enlightenment and for healthy and natural growth. The broader humanism establishes a unity of the concept of value. When economics is fully permeated with the consciousness of human value, the cleft between the mechanical and ideal will be healed. The science will not be concerned with remote and abstract generalities but with the scrutiny in details of concrete situations and with intelligent attention and deliberate control for improvement. Thus ends grow, and standards of judgment and ideals are improved. The vexatious opposition between naturalism and humanism disappears when various value-planes are recognised, the physico chemical in the realm of tropisms or mere instinctive responses, the biological in the realm of progressive adaptation, and the ethical in the realm of group selection and control. The successive principles of value show an utilisation of the elements in the next lower plane, and in the highest epitomise the whole evolutionary purpose in the upward course of life. The lack of human adaptation to the environment rests upon conflict between the respective value-planes, while institutional maladjustment signifies nothing more or less than repression and conflict of wishes which seek for satisfaction in groups. Regions or groups are thus values, and their suppression means a partial or complete non-fulfilment of instinctive dispositions, or felt and conscious needs and desires in the formation and evolution of which human geography, ethnology and history take a concrete part. Such is the institutional conception of values with its significance for social pathology and therapy.

It is social abnormalities which have first furnished the clue to the analysis of social values, even as Freudianism from being a key to the problem of pathology has now become a method of analysis of normal mental states and processes. As Paton observes: "The study of normal development was only undertaken under the compulsorily aroused interest in morbid processes; and research into the nature and origin of pathological phenomena followed because the morbid processes, upon superficial examination, struck the imagination more forcibly than did the normal physiologic reactions of normal growth."[6] This will be more true of the social sciences where the disintegration of personal values and of group life and mind are today suggesting new clues to the analysis of normal social processes, though it must be recognised at the same time that society is something more than the functioning of unconscious minds.

In diverse environmental circumstances or social conditions, values become dispersed, and they are standardised and crystallised even as groups are. We thus arrive at a pluralistic conception of values, though there is such a thing as eternal value which makes itself manifest in a variety of forms. This is also a dynamic conception. As values deepen and expand, a larger and larger number of impulses find fulfilment, and group life which embodies the fusion of these attains greater stability. It is sublimation which satisfies the largest group of impulses in a harmonius synthesis, and which is the pre-requisite of an elaborate group formation, and of a co-ordination of mutual relations between groups and the psycho-social values these represent. Thus personality rises to ever-higher levels in an ever-expanding process of the compounding and inter-penetration of values and wish-fulfilling groups by the reciprocal adjustment of individual and institutional environment. With the recognition of the ascent of values as measuring also an uplift of the quality of life there is more and more a conscious attempt to relate impulse and habit to the larger ends or values of group life. These are not interpreted, as of old, by a bare utilitarianism running in terms of conscious conation, nor pursued as mere derivative satisfactions. The nature of ultimate values no longer recedes into the background.

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[6] Paton, *Human Behaviour*.

On the other hand the philosophy of Humanism is rendering impossible in thought the abstraction of economic or any special field of social activity. The ethical revival as manifest in the writings of Eucken, George Russell and others, stands for social solidarity as well as for personal self-realisation through the emphasis of the concrete and the particular as realising spiritual or final values. Life ceases to be a mechanical process of individualistic give and take, obedience and satisfaction. It is ennobled by consciousness of unity with the myriad life of humanity. But the infinite life is revealed to the individual not in such abstractions as the state or humanity but in multitudinous groups in which the heart will more easily attain its own infinitude of feeling.[7]

The acquisitive and possessive impulses which have been so much exaggerated in the last few decades will, we believe, in the next few decades be duly limited in vital modes of association, and the separation between intrinsic or final and instrumental or economic ends which has threatened to corrode social life will no longer warp the feeling and judgment of people. Final or ideal values will be imported into the common daily life of toiling humanity and will lend it a grace and dignity born of the consciousness of its place in a vast scheme of things. Economic activity will be both a means of social service, and an opportunity for personal self-realisation; it will become a sort of daily sacrament. Economic thought and planning will be inspired by the genius of the race which will declare to the individual its evolutionary purpose even as it has planned for bees and ants the polity of the hive or nest, and for every region or group Nature and Man will envisage a distinctive pattern, making manifest in time its portion of eternal beauty and wisdom. The different economic ends will attain a unity of character as the creation of one myriad-minded Economist who is speaking through the ages in the accents of history for the cessation of the eternal disparity between might and right, between property and poverty, between enjoyment and creation. The economy of the earth will thus be transfigured and the economics of peoples related to the economics of humanity.

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[7] *The Interpreters*, by A. E.

THE INDIAN COTTON-MILL INDUSTRY

1853-1922

P. P. PILLAI

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Though the first cotton mill on Indian soil was established at Calcutta in 1838 it was not till 1853, when the enterprising Parsi merchant, Cowasji Nanabhoy Davar, erected a mill in Bombay with 5000 throstle spindles, that the production of yarn and cloth by steam power in India can be said to have had its foundations well and truly laid. About the same time, one Mr. London, an Englishman, is said to have started a small factory at Broach, but nothing was heard of it till after some years, when it had developed into a fairly large mill. By the beginning of 1875, there were 48 cotton mills in India, with looms and spindles estimated at 10,000 and 1,000,000 respectively. The earliest of the Bombay mills were the Oriental, the Manekji Petit, the Alliance, the Great Eastern, the Coorla and the Morarji. Excepting the Alliance, all were both spinning and weaving mills. From the very inception of the cotton mill industry, the proprietors appear to have realised the importance of manufacturing cloth consumable in the home market, but the great rise in the price of raw material, which had reached the phenomenal figure of Rs. 600 per candy of 784 lbs. had the blighting effect of causing a suspension of mill-activity; since it was impossible to confine manufacture to the coarser varieties of cloth alone at the enhanced price, while the plant already installed, and the quality of home-grown cotton precluded the possibility of attempting the finer varieties. After the termination of the American Civil War, when prices declined to normality, there was once again an outburst of cotton manufacturing activity in Bombay, while the more far-seeing industrialists found a field for their energies in the areas in the closer neighbourhood of the cotton-growing districts. The late Mr. J. N. Tata, whose fame as a mill-owner has been eclipsed by his posthumous successes in the hydro-electric and iron and steel industries, was the first to seize the opportunity, by establishing a factory at Nagpur; and he was closely followed by Mr. Morarji Goculdas at Sholapur. The Empress Mill, Tata's concern at Nagpur, it is interesting to note, started working on January 1,1887, and is so named because Queen Victoria was on that day proclaimed Empress of India. The significance of the action of these two leading industrialists in moving the industry outside Bombay, the Cottonopolia of India, consists in the fact that it led to the development of the industry in places like Ahmedabad, nearer the zones of the production of raw cotton, and thus tended in some measure to relieve the congestion of the capital city. The latter problem has assumed serious dimensions at the present time, and the Indian Industrial Commission of 1916-18 was compelled to recommend that no industrial concerns should be started in the future in certain areas without the sanction of the Municipality.

By the beginning of 1882, the number of mills had risen to 62, the authorised capital, so far as is known, to £ 80,000 (Sterling capital) and Rs. 65,652,350 (Rupee capital), and the number of looms and spindles to 15,116 and 1,654,103 respectively. The number of persons employed was 53,624. While the imports of twist and yarn remained almost stationary in the seventies, the Indian exports went up from 2.01 million lbs. (annual average) in the quinquennium 1871-75 to 15.39 millions in the succeeding quinquennium; and though the imports of manufactured cotton goods were steadily on the increase, the Indian exports of cotton manufactures of all sorts rose from 12 million yards in the earlier half of the decade to 19 millions in the later half. Lancashire, which regarded the Indian market as its own close preserve, was frankly alarmed by this tendency, though yet it was hardly affected by the development of the Indian industry. In 1877-78, therefore, it began to exert itself in the matter. The deficiencies in Indian revenue caused by the Mutiny and other military activities in India had driven the Government to levy heavy import duties—amounting at one time to 20 percent ad valorem,—and Lancashire attributed the

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[1] See the Report, cmd. 51 of 1919, p. 159, para. 249.

prosperity of the mills to their protective influence. It accordingly got the House of Commons to pass a Resolution to the effect that "in the opinion of this House, the duties now levied on cotton manufactures imported into India being protective in their nature, are contrary to sound commercial policy, and ought to be repealed without delay as soon as the financial condition of India will permit." As a matter of fact, as we shall see later on, the duties had no protective effect to speak of, as the Indian products did not compete with those of Lancashire; there can be no protection where there is no competition. But Lancashire was persistent, and the House of Commons re-affirmed their Resolution of 1877, with the result that on March 13,1879, the first step in the ultimate repeal of the import duty on cotton goods was taken. It was then confined to the coarsest class of Lancashire grey goods, which came nearest the region of Indian competition. In 1882 all import duties were abolished, and India became fully a free trade country.

The years immediately following the repeal of the import duties saw a rapid development in the Indian cotton industry. It was stated by Sir Henry James in the House of Commons Debate of the 21st February, 1895, that between 1882 and 1895, the number of spindles had increased from 1,550,000 to 3,500,000; and that while in the six years ending in 1882, the United Kingdom held two-thirds of the trade with Hong-Kong, China, and Japan, in the four years ending in 1895, four-fifths of this trade had passed to India. The figures indicating the progress of the mill industry from 1883-84 to 1903-04 are shown below:—

Year	Mills	Authorised capital	Persons employed	Looms	Spindles[2]
1883-84	74	Rs. 81,677,250			
		£ 80,020	61,835	16,251	1,895,284
1893-94	138	Rs. 113,300,840			
		£ 568,210	130,570	29,392	3,539,681
1903-04	206	Rs. 154,870,050			
		£ 1,067,245	186,144	45,281	5,167,608

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[2] *Vide statistics of British India*, Vol. I; No. 1558 of 1922; p. 55.

In the course of these twenty years, it will be seen that the industry nearly trebled itself in magnitude. The increase in spindles was roughly the same in each decennium, though looms increased a little faster during the second half of the period. Altogether, spindles increased by over 175 per cent, and looms by over 185 per cent. In 1903-04,113 of the mills were exclusively devoted to spinning, and 5 exclusively to weaving, the rest combining both the processes. Of the operatives, 64 per cent. were men, 20 per cent. women, and 16 per cent. children; and as compared with English mills, the percentage of men employed is very high. All but 33 of the mills were owned by joint stock companies, financed as the table above shows, largely by Rupee capital. Prominent among the mill-owners were the Bhatias, while Englishmen, Parsis, Jews, and Mahomedans brought up the rear. Up-country mills were largely Indian owned.

During the closing years of the last century, the Bombay cotton industry suffered great vicissitudes. Apart from recurring difficulties due to financial short-comings, and to faults in management and equipment, there was a succession of special troubles. The outbreak of plague drove the operatives from the city in thousands, and the high plague mortality made labour scarce. In 1900, drought curtailed enormously the supplies of raw cotton, while famine reduced the purchasing power of the home consumers. Political disturbances in China, and fluctuating exchanges injured business with that great consuming country. In consequence, many mills went into liquidation, reduced their capital, or underwent reconstrucion. At the same time, the industry showed some expansion since some of the newly erected mills were equipped with up-to-date machinery, and as a result, the quality of production showed some improvement. With the cheapening of the raw material, the extension of the foreign demand for yarn, and a steadily widening home market, —which soon reasserted themselves—the industry was once again enabled to pursue its course of quiet progress. In 1913-14, the number of mills had risen to 264, with a Rupee capital of Rs. 215,023,050 and a sterling capital of £ 636, 274; while the looms and spindles numbered 96,688 and 6,620,576 respectively, giving employment to as many as 260,847 persons. With the outbreak of the War, India sufferd a heavy falling off of the export trade in both yarn and woven goods, and in 1915, out of about 80 Indian mills quoted, 20 paid no dividends. The statistics for the war period and after may conveniently be summarised in the following table:—

Year	Mills	Capital (Authorised)	Operatives	Looms	Spindles
1914 15	255	Rs. 214,297,234 £ 516,078	260,140	103,311	6,598,108
1915 16	267	Rs. 219,879,390 £ 516,078	275,871	108,417	6,675,688
1916 17	267	Rs. 222,805 058 £ 518 400	277,370	110,812	6,670,162
1917 18	269	Rs. 238,855,966 £ 518,400	284,054	114,805	6,614,269
1918 19	264	Rs. 276,982,217 £ 318,400	290,225	116,094	6,590,918
1919 20	263	Rs. 383 579,042 £ 318,400	305,511	117,558	6,714,265

The paid-up capital of the mills in 1919-20 was estimated at Rs. 270,783,642 and £ 258,888. The debenture capital amounted to Rs. 34,229,472 and £ 99,000. Of the persons employed, 222,884 were men, 54,647 were women, and 27,980 children.

While this survey of the history of the industry for the last 70 years reveals on the whole a quiet and orderly development, with the exception of two or three periods of crisis, yet the comparative backwardness of the industry is clearly revealed by a reference to the present position of the mill industry in the United Kingdom. In 1916, according to Sir Dinshaw Wacha's calculations, the United Kingdom had 318.2 spindles, and 17·8 looms, to every 1,000 of her population, while India's corresponding figures were only 21.7 spindles, and 0 35 looms.[3] The relative position in India and Great Britain by the end of August 1921 was as follows:—

	India	United Kingdom
Looms	123,783	790,399
Spindles	6,870,804	60 053,246

With these figures in mind, and with only a very slow development of the cultivation of long stapled cotton in India, it may reasonably be enquired what prospect India has of displacing the enormous imports of piece-goods from Lancashire.

We may now turn our attention to the output of the Indian mills. If the variations in the imports of yarn may be taken as an index to the quantity of home production, the Indian position in yarn certainly seems satisfactory. During the last three decades of the nineteenth century, imports of cotton yarn have fluctuated greatly in quantity, while in the nineties they fell away in value. British twists of lower counts have declined, partly because similar yarn is increasingly manufactured in India, and partly because the hand-loom weavers, who consumed a large quantity of foreign yarn, have declined in activity on account of the keen competition of the machine-made goods. The bulk of the yarn imports in 1900 consisted of coloured yarns of medium counts, from 26 to 40, spun from long stapled cotton. On the whole yarn imports cannot be called progressive, for quantities have remained almost stationary in 1890 in 1890-1900, despite a considerable fall in prices. As regards production at home, the official statistics show that it amounted to 432,352,120 lbs. in 1895-96, and though there was a serious diminution the next year, thenceforward it steadily advanced, till in 1899-1900 it came to 513,923,248 lbs. The next year saw a serious drop to 352,973,037 lbs. from which it recovered rapidly, and gradually advanced to 682,776,851 lbs. in 1913-14, the year previous to the outbreak of war. The following table compares the imports in yarn with home production:—

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[3] Vide *Journal of the Society of Arts*, July 19, 1918, p 551.

Years	Imports in lbs.	Indian mills production in lbs.
Annual average for the 5 years ending with 1908.	38.573.000	641,776,000
5 years ending with 1913.	11,794,000	646,754.000
1913-14	44,171,000	682,777,000
1914-15	42,864,000	651,985,000
1915-16	40,427,000	722,425.000
1916-17	29,530,000	681,107,000
1917-18	19,400,000	660,576,000
1918-19	38,095,000	615,040,000
1919-20	15,097,000	635,760,000
1920 21	47,333,000	660,003.000
1921-22	57,124 742	692,313,000

An interesting fact which emerges from these figures is that while the Indian mill production showed a tendency to expand in the early years of the war, rising to the high water mark of about 723 million lbs. in 1915, there was a reduction in the output since, though after 1918 there has been a gradual increase. On the whole, the increase over the pre-war period has been well maintained. Part of the diminution in 1916-20 was due to the spinning of higher counts; there was an increase in the production of higher counts to the extent of 22.9 million lbs. between 1914-15 and 1916-17; whereas in the lower counts, *viz.* below 20, there has been no increase to speak of.

YARN PRODUCTION IN INDIA, ACCORDING TO COUNTS. (In million lbs.)

Counts	1914-15	15 16	16-17	17 18	18 19	19-20	20-21	21-22
1 to 10	131.0	115.3	110.6	..	87.3	84 2	84.0	98.1
11—20	343.3	386.2	369.5	..	314.5	347.0	360.0	371.3
21—30	156.2	169.7	171.4	..	189.2	183 7	199.1	203.2
31—40	18.7	18.6	24.0	..	19.2	17.1	15.0	16.9
Above 40	2.2	1.9	4.6	..	4.6	3.6	2.1	.42

The tendency of the post-war years has been in the same direction; and it will be noted that the increase in production has been highest in counts 21 to 30. The present total imports of yarn are well above the pre-war average, and their relative expansion has been greater than that of the Indian mills. Home production suffered severely through depreciation of plant during the war, while there was no possibility of importing new machinery; and it is only during the past two or three years that Indian mills have been able to secure their renewals. It may therefore be confidently expected that the next few years will witness not only an increase in the total output but also an increased output in the finer counts. (In 1921-22, the greatest weight was spun in the following counts, in order of importance: 20s; 24s; 11s; 22s; 12; 21s; 10s; 16s; 14s; and 30s.)

It has been necessary to go in such detail into the question of counts not only because of the prospects which the manufacture of finer counts opens up for the manufacture of the better varieties of cloth; but also because such an examination is essential in order to ascertain the range of competition between home-made and imported cotton manufactures. Confining ourselves to yarn, the following table indicates the present position. (In units of 1,000 lbs.)

COTTON: imports in 1921-22				Indian mill production
Twist & yarn.	U. K.	Japan.	Total.	1921-22.
Nos. 1—20	1766	4863	6961	169,370
21—25	1122	..	1219	150,579
26—30	2891	1311	4238	52,583
31—40	18366	6888	26711	16,900
Above 40	8568	253	8882	2,389
Greys & coloured two folds	4546	1125	5746	....
Unspecified descriptions & waste	2815	475	3338	492
Total	40074	14915	57125	692,313

These figures make it clear that in counts below 30s. the Indian mills are supreme. From 31s. to 40s. Indian production has declined from 24 million lbs. in 1916-17 to 16 9 millions in 1921-22. Above 40s., too, Indian spinning has declined during the past three years, and imports have been well maintained. The range of effective competition, therefore, is confined to the higher counts alone, or at any rate, principally. Mr. Austen Chamberlain emphasised this point in his reply to the Cotton

Trade Deputation from Lancashire which waited on him in March 1917, when the Indian import duties were slightly raised. He said, "The information given to me leads me to believe that probably the real area of serious competition is in counts from 24 to 28." From the Indian manufactures' point of view, then, an import duty on the higher counts of yarn would foster indigenous production in that class of goods; but its effects on the hand-loom industry of the country would be disastrous. That is why, when a 5 per cent. duty on all cotton yarns imported into the country was imposed in March 1921, there was a loud outcry against it. In the debate in the Legislative Assembly, the Hon'ble Mr. T. V. Seshagiri Ayyar said that there were about six million people engaged in the hand-loom industry, who used the finer kinds of imported yarn, to whom such a duty would spell absolute unemployment.[4] There can be no doubt that the Indian Government would not have insisted on its retainment but for its urgent necessity for a higher revenue.[5]

Before passing from the question of yarn production, it may be interesting to note the number of lbs. of yarn produced in India per spindle in position, which is a fairly good index of the steadiness with which the spindles have been worked, and of the prosperity or depression of the industry. It was rather low in 1919, when it was only 91.93 lbs. per spindle, gradually improving to 94 lbs. in 1920, and 96.05 lbs. in 1921. Probably the highest figure reached in recent years was in 1906, when it was 128.97 lbs., while the average during the war period was about 100 lbs.

Turning to the production of cloth, we notice that the opening years of the century witnessed an expansion in the production of woven goods. Mill-owners had discovered that cloth production for the neglected home market was less risky and more profitable than yarn production for foreign markets like China, while at the same time it carried the process of cotton manufacture one stage ahead, and enabled the country to compete better with the coarser varieties of imported cloths. The war gave a great impetus to cloth manufacture, and it is a matter on which the Indian mills take a legitimate pride that all the military requirements in cotton goods in the Eastern theatres of war were supplied by them. The diminution in the export trade in yarn increased the quantities available for production of cloth, while the shrinkage in imports, due to the Lancashire mills having undertaken war-work, and the shortage in shipping, widened the market for the indigenous cloths. According to Sir Dinshaw Wacha's calculations,[6] the net total yardage of imported goods in the pre-war year was 313.51 crores. This steadily declined to 240.98 crores in 1914-15, and 100.77 crores only in 1918-19. Further analysis reveals that the diminution was heavier in bleached and dyed goods than in grey goods. The shortage in imports was accompanied by a rapid rise in prices. The opportunity was not lost by the Indian mills, which increased their output to the full extent of their loom-power, the inability to import machinery preventing as speedy a development as would otherwise have taken place. Confining ourselves to the net production (i.e. minus exports) of grey and coloured piece-goods, (the production of bleached goods, being still in its infancy, may be left out) the figures in 1913-14 were 82.87 crores of yards of grey goods, and 24.68 crores of yards of coloured goods, making a total of 107.55 crores of yards. These figures steadily increased, till in 1916-17, grey goods came up to 106.55 crores, and dyed goods to 36.25 crores, of yards. In 1918-19, there was a setback, owing to the cessation of hostilities, the grey declining to 102.02 and dyed to 27.84, crores of yards. The total figures showing the developments during war-time and after, are as follows:—

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[4] See *India's Parliament*, Vol. III, p. 231, Calcutta Govt. Press, 1922.

[5] See ibid., speech of the member for Commerce and Industry.

FIGURES SHOWING IMPORTS AND HOME PRODUCTION IN PIECE GOODS ETC.

Year	Imports (Yards)	Home production (yards)
1913 14	3,199,410,219	1,164,291,588
1914-15	2,448,137,123	1,135,707,952
1915-16	2,152,447,549	1,441,514,550
1916-17	1,942,422,766	1,578,132,789

[6] Quoted at pp. 29-32, *Review of the Prospect of British Trade in India at the Close of the War*, Overseas Trade, Cmd. 442 of 1919.

1917-18	1,560,810,380	1,614,126,458
1918-19	1,121,292,060	1,450,726,160
1919-20	1,087,989,022	1,639,779,227
1920-21	1,491,200,000*	1,580,849,746
1921-22	1,080,100,000	1,731,573,296

Figures marked include only the three main classes viz. grey, white, and coloured, printed or dyed goods.

The diminution in imports, as the foregoing figures indicate, is certainly not due to a sudden expansion in Indian production, but must be explained by a reference to prices and to general conditions of trade. It would be tedious to give the figures, but the results may be rapidly summed up. From 1913-14 to 1920-21, there has been a reduction in yardage in the three main classes, the rates being 62% in grey, 47% in white, and 41% in coloured, printed or dyed goods, while the prices of the three classes rose from (in millions) £17 to 26.5; £9.5 to £22; and £12 to £34.6 respectively. Had prices remained at the 1913-14 level, the quantities of piece-goods which would have been imported in 1920-21 for the sum actually spent that year would have shown an increase in yardage of at least 33.3% over the pre-war level. The declared value per yard of the three classes above enumerated showed a steady rise, which curtailed the extent of its market.

DECLARED VALUE PER YARD OF THE IMPORTED PIECE-GOODS (in Rs.)

Class ..	1913-14	18-19	19-20	20-21
Grey ..	0-2-8	0-6-6	0-6-9	0-7-4
White ..	0-2-11	0-7-4	0-7-11	0-8-4
Coloured &c. ..	0-3-5	0-8-4	0-9-10	0-11-4

The effect of the rise in prices has been summarised by a correspondent in the Manchester Guardian Commercial of the 11th May, 1922. "The vast population of India and the East, who are the greatest consumers of cotton goods in the world are very poor, and have their tastes dictated to them by the price of cloth. The cheapness of bleached and coloured goods before the war had placed the lowest qualities of these within reach of great numbers of people, and the trade in them was a steadily expanding one, which appeared to remain principally in the hands of Lancashire. Even in 1920, when prices were at their highest, printed and bleached goods remained relatively cheap compared with grey cloth, and at that time, the general view was that this would pass more and more into the hands of local mill-owners and the Japanese. Since that date, however, the high finishing charges have driven the consumer off the coloured, and to a smaller extent, off the bleached goods back on the grey cloths. So great has been the decline in the cost of cloth that India has bought Lancashire grey cloth in large quantities at prices that have been able to compete with the Japanese and Indian made goods." The rise in the price of finished goods is only an aspect of the situation, the cardinal feature of which was a rise in prices all round. American cotton prices are, naturally enough, the dominating factor in determining the price of piece-goods all over the world. The year 1919-20 saw a rise of cotton prices in America, culminating in quotations of over 43 cents for Middling in April, 1920, followed by a decline to 11 cents in March, 1921; and in the principal cotton manufacturing countries the price rose and fell in like manner. In India falling exchange more than neutralised falling values, and the local prices of piece-goods were in consequence longer maintained, no real break occurring till the middle of February, 1921. Even in 1921-22, when prices fell and there was a revival in trade the high finishing costs noted already kept down the bleached and coloured varieties. Meanwhile, Indian piece-goods also were rising in prices, though at a slightly lower rate. Indian greys had risen from 2.44 annas per yard in 1913-14 to 5.95 annas in 1918-19, and the dyed goods from 3.04 annas to 7.1 annas. This difference in the rate of rise, slight as it was, was clearly in favour of greater home production to meet the rising market.

Exchange difficulties also brought about deadlock in the import business; and as a consequence, an opportunity for the further stimulation of home production. Orders for piece-goods had been freely placed in the United Kingdom when exchange was high. British mills were then working at full pressure and some months necessarily elapsed before deliveries were made.

Meanwhile, (June to December, 1920) exchange had fallen, and Indian importers were faced with serious losses. They had pinned their faith to the recommendation of the Currency Committee of 1919[7] to stabilise the rupee at two shillings gold, and had even hoped for higher levels. But the rush for remittance overwhelmed exchange, which fell remorselessly. The rupee fell from 2s. 4d. (T. T.) on April 1,1920, to 1s. 2⅞d. (T. T.) on March 7, 1921. Faced with losses ranging from 50 to 70 per cent. of the cost price of goods ordered, which they were in many instances unable to meet, the importers sought refuge in resolutions pledging themselves to refrain from settling any contracts at a lower rate than 2s. to the rupee in the case of English contracts, while in the case of Japanese imports, settlement was to be deferred till exchange reached Rs. 150 per 100 yen. Importing houses and banks as well as English manufacturers were affected by these decisions. The tension has since passed away, but a feeling of soreness has remained against the English exporters, who had insisted on the due fulfilment of contracts in spite of the crisis that had overtaken the importers. The situation was one of which, to the casual observer, the Indian mills might have been expected to take full advantage by capturing orders withheld for the time from Manchester and Japan. That they did not do so, says the Official Review of the Trade of India,[8] is evidence, not of any weakness of organization, for the mill owners' associations are fully competent to deal with such situations, but of the comparatively small range of goods in the production of which Lancashire and the Indian mills are in active competition.

It is now necessary to examine the last point above referred to in somewhat greater detail. It is much more difficult to estimate the area of competition in cloths than in yarn, as expert examination is required as to the counts used in the various Indian makes. Generally speaking, Indian cloths are woven from coarser counts than the corresponding Lancashire qualities. The Government of India some few years ago endeavoured to

[7] See cmd. 527 of 1920

[8] (47th issue, p. 4).

estimate the approximate area of competition, and deputed an officer of considerable customs experience to undertake the work. According to his investigations, the percentages of imports of unbleached goods from Lancashire of those descriptions falling within the sphere of practical competition are as follows:—

	Quantity %	Value %
Shirtings and longcloth	90	90
Drills and jeans	100	160
Chadars	80	75
Dhoties, saris, & scarves ..	30	22

It should be mentioned, however, that dhoties are very difficult to estimate, and that the competitive limit is probably greater than 30%. The percentages for value in the above statement are duly weighted in consideration of the lower average value of the grades included. As regards bleached cotton piece-goods, it is estimated that about 5 % represents the range of practical competition. With regard to coloured goods of coarser counts, the percentages would probably be:—

	Quantity %	Value %
Checks, spots and stripes	70	60
Dhoties	10	30
Drills and jeans	100	100
Saris and scarves	20	16

Accepting these percentages, the proportion of imports falling within the sphere of competition during the five years immediately preceding the war would be as shown in the table given on the next page. According to this calculation, the area of competition covers roughly a little over 26 % of the total piece-goods imports from Lancashire. H. M. Senior Trade Commissioner in India, from whose Report these figures are taken,[9] is inclined to think this an over-estimate, and would place the competition in bleached goods, for example, at much below 5%. The total export of cotton goods from England in 1913 amounted to 127 millions sterling, forming nearly a third of the total exports of all manufactured goods. In the same year the trade in cotton goods to India amounted to £ 37,240,000 or 29.3 % of the total cotton exports from Great Britain. Mr. Austen Chamberlain, in his reply to the Lancashire Cotton Trade Deputation in 1917, said that "the proportion of your Lancashire trade with which Indian mills are in effective competition does not amount to more than 2 % of your whole trade." If the range of competition is as estimated above, it affects a little over 7 % of the total cotton exports of England; and considering the wide divergence in the classes of goods produced in the two countries, it is difficult to believe that it covers such a wide area.

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[9] Cmd. 442 of 1919, pp 36 37.

TABLE SHOWING THE PROPORTION AND VALUE OF IMPORTS FALLING WITHIN THE AREA OF COMPETITION.

Description	Annual average of imports. (1909-10 to 13 14) £	Estimated proportion affected by Indian competition per cent.	Estimated value of imports affected by Indian competition £
Grey (unbleached) chadars ..	48,345	75	36,259
Dhoties, saris and scarves. ..	6.905,037	22	1,519,108
Drills and jeans ..	301,645	100	301,645
Longcloth & shirtings ..	5,455,445	35	1 909,631
All other kinds	1,350,881	..	..
White (bleached) ..	7,468,859	5	373,443
Coloured, printed or dyed —			
Checks, spots and stripes ..	90,266	60	54,160
Dhoties, including lungis ..	610.263	30	183,079
Drills & jeans	340.530	100	340.530
Saris & scarves ..	1,009,852	16	161,576
All other kinds	6,581,066	..	..
TOTAL ..	30,157,892	..	7,879,431

It is necessary in this connection to notice the competition offered by Japanese imports to Indian mill production. The relative proportions of Japanese imports to those from Lancashire do not seem very impressive; yet the figures leave no room to doubt that the former is increasing at a sufficiently rapid pace to cause anxiety to Indian industrialists. The war period gave the Japanese a splendid opportunity, of which they were not slow to take advantage, and their imports, particularly in the grey goods, have been greatly expanding. The average imports in this line for the five years ended 1913-14 came to 2.6 million yards; in 1916-17, it had run up to 75.6 millions; the next year saw a decline by about 2.3 millions, which was more than made good in the succeeding year, when the grey goods imports rose to the phenomenal quantity of nearly 207 million yards. In 1919-20, Japan experienced a severe industrial crisis, the effects of which she has not yet completely got over. The imports of the other classes of cotton goods also show a like rise and fall. But the Japanese cotton industry is expanding, and as an exporter to India, Japan possesses some exceptional advantages. Being a large importer of Indian short stapled cotton, she has in her buying agencies in the up-country districts an efficient organisation to push her manufactured goods. Japanese yarn and piece-goods travellers are active throughout the country, especially on the Bombay side, trying to capture the direct trade with Indian wholesale importers; and the present writer recollects the surprise he felt on seeing one of this fraternity in an out-of-the way village in the Madura District, sounding the cotton possibilities of the place with his broken Tamil. It is also believed that subsidised steamers carry the cotton to Japan, and transport the manufactured goods back to India, at rates fixed by the Rengokai (the Japan Cotton Spinners Association). Japanese labour. too, is cheaper, not because there are any wide differences in the rates of wages in the two countries, but because the Japanese employ three women workers to every male worker while in India, female operatives number less than one-fifth of the total number of workers; and the wage of a woman in Japan is about three-fourths that of a man. The Indian export of yarn to China is now less then half of what it was a decade ago, because of its displacement by Japanese yarn; and in the manufacture of cloths, she is specialising in most of those lines which more directly compete with Indian production than the Lancashire varieties.

Of the plain goods made by the Indian mills, shirtings and longcloth, dhoties, T cloths, domestics and sheetings, drills and jeans, and chaddars are the more important types. In 1921-22, shirting and longcloth advanced from 292 million yards in 1913-15, and 456 million yards in 1920-21, to 487 million yards. Dhoties rose from 285 million yards in the pre-war year, to 340 millions in 1920-21, and to 456 millions in 1921-22. Part of these goods falls within the area of the Lancashire trade; but drills and jeans which rose from 28 million yards in 1913-14 to 74 millions in 1920-21, and declined to 60 millions in 1921-22, compete more particularly with Japanese and American goods. The production of coloured piece-goods, which rose by 54% during the war, has since steadily fallen, the output in 1921-22 being 6 million yards short of the previous year. A great number of the mills now possess dyeing and finishing plants, and all the tendencies point to a development in the bleaching, dyeing, and even printing industries. It will be of interest in this connection to note that the quantity of calendered goods rose from 61.72% of the total production in 1920-21 to 64.4% in 1921-22. The increasing imports of long staple cotton, which in 1921 was nearly thrice the quantity of the previous year, furnish an index to the improvement in the quality of the goods made, and this tendency will be greatly strengthened by the keen attention that is now being devoted to long staple cultivation in the country itself.[10] The indigenous short staple varieties yield a crop more prolific than indigenous long stapled varieties and command a fair price, both at home and in its foreign markets; and the cultivators were unwilling to abandon them for the longer staples unless they were assured of new markets, at remunerative prices, for their new crops. Latterly, however, there has been a keen demand for the better varieties, the production of which has fallen short of the demand; the price of "Fine Broach," the standard on which the price of Indian Cotton is based, ruled before the war at about Rs. 250 per candy of 784 lbs. In 1918-19, it was Rs. 770 per candy. The Liverpool price of "middling American" which before the war ruled ordinarily at 6½ d. to 7d. per lb. was in 1918-19 as high as 25d. per lb.[11] Under the stimulating influence of those high prices, it is reasonable to assume that greater areas will be put under long staples in India, and thereby give an additional encouragement to the production of finer cloths.

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[10] See *Report of the Indian Cotton Committee*, 1919.

The Indian cotton mill industry was faced with extraordinary troubles during the first decade of the present century, some causes of which have already been alluded to. According to Mr. C. N. Wadia, of Messrs. C. H. Wadia and Company, the net profits of the Bombay cotton mills steadily declined during this period, and while in 1905, they had a net profit of 2.35 crores of Rupees, it had diminished in 1909 to 0.16 crores, while in 1910 and 1911, they had to meet losses of 0.41 and 0.51 crores respectively. In 1914, the loss was 0.19 crores; but since the outbreak of the war, the industry has enjoyed an unparalleled spell of prosperity. Further following the fortunes of the industry in the city and island of Bombay, we find that the net profits there for the three years 1919, 1920 and 1921 were 10.88, 13.3 and 12.22 crores of Rupees respectively.[12] An analysis of the dividends paid by 58 leading Bombay mills in 1919 shows an average rate of distribution of 44%. The gross profits of the Bombay mills in 1920-21 were estimated by the Chairman of the Mill-owners' Association at 16 crores, which amounted, at the exchange then ruling to 16 millions sterling. The dividends of 35 leading mills that year showed an average of 59%; and the high levels at which shares are quoted show that a prolonged period of prosperity is anticipated.[13] The present position is best summed up in the words of the Chairman of the Bombay Mill-Owners' Association at the annual meeting on March 27, 1922: "From a manufacturing point of view, the period has been one of continued prosperity, both spinning and weaving having been fully engaged, though bleaching and dyeing, following the popular clamour for plain goods consequent on Swadeshi and other causes, had had but a poor trading time. I estimate the profits of the Bombay cotton mills to be about 30% to 35% less than they were for the previous year, when margins reached their zenith. On these results think we can congratulate ourselves, especially as the textile industry in almost every other country in the world has been passing through a period of acute depression. We are of course sure to have our cycles of bad times, but I am fully confident that we are now in a position to cope with them, and though indications are, at the present moment, not wanting that margins of profit may not be so large as before, I consider that the industry will more than hold its own for years to come, and still show a reasonable return to those who invest and work in it. Little or no expansion of factories has taken place, due to the continued high cost of machinery and the difficulty of housing labour, and as you will see from our Report, only some 60,000 spindles and 2,000 looms have been added in Bombay Island." In further explanation of the high cost of machinery may be mentioned Sir Charles Macara's calculation, quoted in the Manchester Guardian, that the cost of erecting a ring-spindle is now double what it was before the war, both in India and in England, and that, while it is now about £ 7 per spindle in England, in India it is nearer £ 14. It is, however, satisfactory to note that whereas the number of looms in Indian mills increased only by 15 per cent. between 1914 and 1920, the increase in the production of woven goods was by 45 per cent. In the matter of extensions, therefore, the Indian mill-owners are now 'going slow', recapitalisation, which was so largely resorted to in Lancashire, has been largely avoided, and substantial reserves have been built up, which may be drawn upon for extensions when prices of machinery become more reasonable.

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[11] Vide Report mentioned above, p. 161.

[12] See Appendix F. p. 108, *Report on an Enquiry into the Wages and Hours of Labour in the Cotton Mill Industry*, published by the Labour Office, Government of Bombay, 1923.

[13] See *Capital*, 26th May, 1921.

Here, in parenthesis, we may cast a glance at the conditions in Lancashire in 1921. It has already been pointed out that the business with India suffered a serious decline in the year under review. That this was not due to the Gandhi agitation or to the Indian import duty of 11 per cent. is clear from the statistics of the Lancashire export trade to other countries. Comparing the present position with that in 1913, it has been estimated that, whereas the total decrease in the Indian trade was 58.1 per cent. (in quantities), the twelve leading continental customers of Lancashire reduced their imports by 56.4 per cent., China by 65.7 per cent., Japan by 73 per cent., Central and South America by 66.2 per cent., and the various British Colonies by 54.7 per cent. The principal reason for the decline in business has of course been the enormous rise in prices,[14] and the fact that the world has not yet recovered from the effects of the Great War. The state of the trade has had its reaction on the financial position of the industry. In 1920, the year of an extraordinary boom in the sale of cotton goods, there was a distribution of profits, a selling of mills, and a re-floation of companies, at figures unknown in the career of the industry. The average dividend of 100 companies that issue balance sheets worked out at 29.47 per cent., the dividends ranging from 13 per cent. to 180 per cent. The year 1921 has a different tale to unfold: according to one report dealing with 230 companies, the average dividend distributed is given as 9.97 per cent. on of a paid-up capital of £ 25,330, 393. Of the companies, 23 paid no dividends at all, 36 paid less than 2.5 per cent. and 38 between 2 5 per cent. and 5 per cent. per annum. The range of payments was from nil to 50 per cent., while 97 out of 230 paid between nil and 5 per cent. and more than one half of the 230 companies were not above the 7.5 per cent. mark. Another report dealing with the financial results of the year reviews the affairs of 317 companies, of which 163 paid no dividends during some portion of the year. The average annual dividend of these companies is placed at 6 per cent.[15]

[14] See the article, "What is the Matter with the Cotton Industry," at page 253, the *Textile Mercury*, March 14, 1923.

[15] Vide section I, the *Cotton Year Book* 1922.

This, it must be remembered, is but a transient phase of the industry, from which it may be expected speedily to recover; but, however short in duration this period of transition may be, it is one which must afford some opportunities for a competitor better to stabilise his footing. The recent fiscal changes in India tend still further to strengthen the position of her cotton industry. It is an open question whether the cotton industry needs any protection at all against foreign competitors. But the imposition of the excise duty of 3.5 per cent. to countervail the import duty has all along been felt as a grievous national insult, and a standing monument to Lancashire's domination over India's industrial life;[16] and when, under pressure of financial necessity, the duty on imported woven goods was raised to 11 per cent. in March 1921, the "countervailing" excise duty was still kept at its old level, the Indian manufacturing industry thus obtaining a protection of 7.5 per cent. This will undoubtedly accelerate the displacement of the coarser kinds of greys now imported from Lancashire, and competition will now move upwards towards the better qualities. Again, whatever might be its effect upon the handloom industry, the 5 per cent. duty on yarn imposed in March, 1922, will stimulate the production, among others, of higher counts. This tariff protection, it is well to keep in mind, is especially high when the 'natural protection' which India enjoys by reason of the difference of the heavy freight charges which Lancashire has to bear is taken into consideration.

An important item in determining the comparative cost of production is the relative cost and efficiency of labour. It is an objection frequently taken that the inefficiency of Indian labour is a serious handicap to speedy industrial development. In a paper read at the Indian Industrial Conference of 1905, (held at Benares) Mr. S. M. Johnson, of the Muir Mills, Cawnpore, said: A power loom weaver in Lancashire works single-handed four to six looms, and will turn out from each an average of 78 lbs. of coarse cloth in a week of 55 working hours, or 468 lbs. in all for a six-loom worker. 'A power loom weaver in (Northern) India looks after, as a rule, only one loom, and all he can turn out of a similar cloth in a week is at the best 70 lbs....The difference is due entirely to the quality of the labourer." In Cawnpore, nine men are required to work a pair of mules of 800 spindles, while, it is said, only three would be necessary in a Lancashire mill.[17] A reference has elsewhere been made to Sir Clement Simpson's estimate at Madras that 2.67 hands in an Indian cotton spinning and weaving mill are equal to one hand in a Lancashire mill.[18] In his evidence before the Indian Industrial Commission, the late Sir Alexander McRobert, the industrial king of Cawnpore, declared that the English worker was 3.5 or even 4 times as efficient as the Indian.[19] It is indeed true that in the United Kingdom, the great majority of men tend four looms single-handed, or six with the assistance of a boy or girl, whereas in India, the majority of weavers attend only to two looms. Women in the United Kingdom tend three looms and four looms, more than half the total number having four, while in the Bombay Presidency men only are weavers. In regard to the earlier calculations, Dr. Gilbert Slater points out that while Sir Clement's statement is arithmetically correct, it is yet somewhat misleading as a test of efficiency. The difference of output is mainly due not to inferiority in the Indian worker—though a certain degree of inferiority does exist—but to the greater cheapness of the Indian worker. The Buckingham and Carnatic Mills were recently working considerably longer hours than Lancashire mills, though not as long hours as permitted by the Factory Act, and the looms were working at a greater speed than is customary in Lancashire. In those circumstances, the managers find it economical to put four men to four looms, whereas in Lancashire you put one woman to four looms. Now four looms will turn out more work with four weavers attending them than they will with one weaver.... In Lancashire it is worth while to put only one worker to four looms because you save three worker's wages. But in India the wages are so small that it is not worth while to save that amount at the expense of running the looms at a lower speed, and so the real difference between the efficiency of a Lancashire and of a Madras operative is very much overstated by the ratio of two and two-thirds.[20] Wages have therefore been the dominating factor in determining the number of operatives put on; but a comparison of the actual earnings of the operatives in the two countries is rather difficult, as the system of wage-payment in the Lancashire industry is somewhat unique. All wages for spinning yarn and manufacturing cloth are paid according to the amount of production; and the elaborate and highly technical Piece Price Lists, such as those of Oldham and Bolton, which govern payment in the spinning section, and the "Uniform List of Prices for Weaving" which governs payment in the weaving section, are not easily understandable, and afford but little clue as to what the operative actually earns. Increases or decreases are made on the basis of the standard price lists, and in 1914, wages were 185 per cent. above the standard price lists; and by the end of 1921, wages were 70 per cent. lower on list prices than they were at the beginning of the year, leaving them still 145 per cent. above the standard. In India, too, wages started on a rapid rise after 1918, but in view of the fall in the cost of living subsequently, the tendency today is towards a slight fall. The fact that the number of weavers attending to more than one loom has been on the increase may, among other reasons, be partially attributed to the enhanced cost of labour. In a recent "Report on an Enquiry into the Wages and Hours of Labour in the Cotton Mill Industry" conducted in the Bombay Presidency, we find it stated that, out of an average daily number of weavers of 43,005 in the mills that submitted returns, 287 attended to four looms, 399 to three looms, 41,121 to two looms and only 1,198 to one loom.[21]

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[16] For a short resume of the history of the Indian cotton duties, see chap. X, *Report of the Indian Fiscal Commission*, Cmd. 1764 of 1922.

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[17] For pariculars showing the number of workers employed on different machines in mills in India and Great Britain, see Appendix B to the Freer-Smith Committee's *Report on Textile factory workers*, Cd. 3617 of 1907; especially the comparative tables showing the number of hands, relative output, and wages in spinning and weaving in India and England given at p. 71.

[18] Vide the present writer's paper on "The Indian Labour Problem," *Asiatic Review*, 1923, p. 49.

[19] See Evidence, Volume 1, Cmd. 234 of 1919, pages 278 et seq.

[20] Vide *The Asiatic Review*, January, 1923, p. 83

[21] Vide Table at p. 13.

One great advantage of the cotton industry of India is that if it can produce goods of like quality and price as its foreign competitors, it need not travel outside the country in search of markets. But producing as she does only the coarser varieties, she cannot at this stage afford to lose her foreign markets where her special types of goods are in active demand. In twist and yarn, her principal markets in order of importance are China, Egypt, the Straits Settlements, Persia, Siam, the United Kingdom, and Arabia. In piece goods, they are Asiatic Turkey, East Africa, the Straits Settlements, Persia, Aden and its dependencies, and Ceylon. The export trade is not perhaps much; but to India it is considerable.

EXPORTS OF COTTON MANUFACTURES FROM INDIA
Annual average in the quinquennium

ITEMS	1909-10 to 13-14	13-14 to 18-19	1919-1920	1920 21
Twist and Yarn				
Quantity (Lbs.)	192,844,000	129,685,000	151,870,000	82,535,000
Value (Rupees)	91,315,000	71,893,000	182 592,300	101,715,000
Cloths				
Quantity (Yds.)	90,220,000	156,669,000	196,555,000	146,365,000
Value (Rupees)	20,895,000	43,043,000	873,62,000	75,063,000

But the aim of the Indian producer is more and more to capture the home market. The demand of the country for cotton manufactures, both yarn and cloth, is evident from the proportion which such imports bear to the total import trade of the country. In the decennium 1860-70, it was as high as 48 per cent. declining to 38 per cent. in the quinquennium 1885-1900. The pre-war annual average for the quinquennium 1909-10 to 1913-14 was 36 per cent., in 1916-17 it was 35.5 per cent., varying to 38, 36, and 28 per cent. in the succeeding years, and ending with 30 per cent. in 1920-21. Mr. A. C. Coubrough, the manager in India of Messrs. Mather and Platt, Ltd. puts the average pre-war consumption of cotton cloth at 480 crores of yards.[22] This includes both home-made and imported mill-manufactures, and also the hand-loom production of India, the latter of which, except for a depression in 1916-20, has been keeping uniform pace with local mill production. Mr. Coubrough's enquiries lead him to the conclusion that the importing merchants of India are able to dispose of imported piece goods of an annual value of about 44 crores of Rupees, and that when the price of imported goods rises, the consumption falls off practically in proportion. These figures give us an idea of the extent of the home market, but it should be remembered that 75 per cent. of the imports being of non-competitive varieties, it would take a very long time before the Indian mills are fully able to meet the home demand. The manufacture in sufficient quantities of the finer kinds of yarn and cloth, however rapidly it may be pushed up, will be a matter of only gradual development; but whenever the Indian mills rise equal to the task, they shall have no need to wander forth in search of purchasers.

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[22] Vide his "Notes on the Indian Piece-goods Trade," *Bulletin of Indian Industries and Labour,* published by the Department of Industries, Government of India.

THE FALLACY OF A GOLDEN AGE

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It has been common in all countries and at all times to find among social reformers a tendency to draw a comparison between the evil condition of the time at which they write and the fancied happy state of some earlier age. The reason for this is not far to seek. In the first place the habit of glorifying the times that are gone seems to be in harmony with a natural quality of the human mind to remember pleasant things more clearly than unpleasant. For, mixed with the pleasures of the present, we are conscious of limitations and elements of dissatisfaction, but in our pictures of the past the pleasant elements survive while the unpleasant tend to fade from consciousness. Thus most of us come to think of the "good old times" and to believe that somehow things are not as good as they used to be. Most old men become "laudatores temporis acti" and by their description of the doings of old are able to fire the imagination of youth.

This suggests a second reason for the use that is commonly made of appeal to the glories of the past. It is a powerful instrument in the hands of those who, for whatever reason, desire to arouse the spirit of discontent. If the past has been great and glorious, why is the present not equally so? What has been possible would seem to be possible again. Thus a desire to change the conditions of the present are stimulated and spread.

There is, however, a third and even more important reason for this argument from a "Golden Age." For those who are discontented with existing institutions and authorities it is a simple process of argument that can be followed by the most ignorant mind to draw a glowing picture of the past, to throw into relief the evils of the present, and then to draw the inference that the effective cause of the change is the ruler, or the system of government, that has not been able to prevent, or that has even actively abetted the transition. Thus the idea of a "Golden Age" gives the colour of actuality to our ideals, while it serves to suggest to the uncritical mind a means for their realisation. Remove the authorities! Return to the ancient state!

It is not likely that a method of argument that is at once in harmony with the common working of the mind and that so readily lends itself to the stimulation of discontent should be neglected by those who wish to arouse this temper. All students of politics are familiar with one form of it. Among the writers on the study of "Politics," from early times right down to the period when modern historical methods exploded the fiction, it was a common device to begin with a description of the "State of Nature," a condition in which justice and peace and prosperity prevailed. It is true that the "State of Nature" was not always thought of as an actual and historical state by the theorists that made use of the conception. But there was always a tendency among the less critical to represent it as such. It is only in the form of the concrete that the common mind can grasp the significance of ideas. Thus the "State of Nature," the "Golden Age," came to be very commonly believed in as an historical condition from which the world had unhappily passed away. In times of popular discontent the change was ascribed to the misdeeds of the rulers, or of the dominant class in society. To mention but two examples, everyone knows with what force Rousseau appealed to the proletariate of France by means of his pictures of a State of Nature which was the rightful heritage of all; and every student of English Socialism knows how the fanciful account of "Merrie England" as it was supposed to have been in the middle ages, before the days or capitalism and competition, has been used to heighten the opposition to the existing industrial system.

In India this notion of a "Golden Age" has played, and still plays, a prominent part in the writings and speeches of those who desire to appeal to the spirit of discontent. And the appeal has peculiar force. For one thing the habitual attitude of mind in India may be said to be one of "looking backward." Respect for ancient custom and reverence for past "sufficiency for their simple needs" refers to the 7th century B. C. Have we any sound historical reason for supposing that at either of these periods anything that can, even with some stretch of the imagination, be described as a Golden Age really existed? Thornton's account is almost entirely a fancy picture not free from obvious error. Thus he deduces the "wealth and grandeur" from the existence of "skilful artisans (who) converted the rude produce of the soil into fabrics of unrivalled delicacy and beauty and architects and sculptors (who) joined in constructing works, the solidity of which has not, in some instances, been overcome by the evolution of thousands of years." This statement is an instance of a glaring anachronism. It is true that at an early age India possessed workmen who produced delicate fabrics. She does so still. It is also true that Indian princes at an early age of Indian history possessed beautiful palaces. But our knowledge of both these things does not date back to Vedic times and certainly no remains of the architecture of that period, even in ruins, are now existent. The testimony of Mr. Vincent Smith, incomparably a more reliable historian than Mr. Thornton, may be quoted. He says: "No buildings of anything like Vedic age survive in India, nor are there any contemporary material remains, except the copper tools and weapons of the north already mentioned, which may be assigned to an early stage of the Vedic period. The oldest Indo-Aryan literature, as a rule, must be interpreted by itself, and we must be content to learn from it alone what we can discover about the Indo-Aryans whose Rishis composed that literature." And what we can so learn suggests nothing in the nature of a Golden Age. Rather it pictures the coming of a strong, fighting people, who first subdued and then mingled with the original inhabitants and built up a social system which in course of time manifested the features that have long been characteristic of Hindu society. Power was concentrated in the hands of a ruling military aristocracy, aided and advised by a priestly caste. War, both against the weaker indigenous inhabitants, and between the different Aryan tribes themselves, was of constant occurrence. These fighting northmen were hard fighters and hard livers, as northmen are apt to be. They fought and gambled and drank and, in short, were very human. In the arts of peace considerable progress had been made. "The skill of the weaver, the carpenter, and the smith furnish many a simile in the hymns." (Drapson, *Ancient India,* p. 40) As they passed from the earlier to the later and more settled periods the form of society became more complex and more rigid. The principles of administration were developed and the social order took on the forms that, with modifications, have been continuous through the later history of the country. The upper classes fought and ruled, enjoying an uncertain, but often a very luxurious life, the means for which were provided by the toil of the masses and the commerce of the traders. In the villages the arts of the cultivator and the village artisan were probably practised much in the manner in which they were carried on through the later centuries. When the monsoon was favourable they probably enjoyed "sufficient for their wants." The fact mentioned by Rhys Davids that the villagers in normal times refused to work for hire is merely evidence of two things —in a primitive economy, where land is plentiful and subsistence farming is the rule, wage labour does not exist; moreover, the functions later and in more economically developed conditions usually performed by wage labourers were, in India, as elsewhere, performed by menials of depressed class similar to the eta of Japan and the serfs and churls of mediaeval England. The statement of Rhys Davids that there were no landlords and no paupers is either incorrect or misleading. If it is taken to mean that the cultivators of the land enjoyed the whole produce of their labour without paying any share of their crops to a non-working class it is untrue. The earliest historical records prove the existence of this obligation. Where else did the materials for the luxury and magnificence of the courts come from? If attention is paid only to the co-sharing proprietors in the land of a village community it is true there are no paupers in the technical sense. But this class of co-sharers was far from co-extensive with the village population. There is no reason to suppose that in primitive times the village did not contain people who were paupers in the sense that they were poor to the point of having only the barest living necessary for existence at a low level of efficiency.

The truth is that those who compare the "wealth and grandeur" of the past with the poverty of the present are guilty of a number of fallacies which are well illustrated in the book of Mr. Lajpat Rai from which I have quoted. The most serious fallacy consists in comparing two essentially different things. As an indication of the state of present poverty the low average income of the population is taken. As a measure of past wealth and grandeur the hoards of precious metals, of jewels, the magnificence of the courts and their luxuries, are taken. But the existence of the two side by side is, of course, the rule rather than the exception. India has always been a country in which the few very rich have co-existed with the many very poor. The riches of the few have always attracted the notice of court historians and of travellers from other countries, while the poverty of the many has, until recently, been unanalysed by statistical enquiry, and also until recently, has been accepted as the natural lot of mankind. It must not be forgotten that, even in the most wealthy countries of Europe, it is only within the last two centuries that the majority of the labouring classes have emerged from an economic state that, allowing for differences of climate, represented a standard of comfort not very different from that obtained by the peasants of India. It is wholly illogical to adduce the evidence of a rich few in the past as proving that then "India was rich in everything that makes a country great, glorious, and noble." Mr. Lajpat Rai forgets the masses who toiled and were taxed to provide these riches. With the advance of education and civilisation much of the old barbaric splendour with which the rich were surrounded in the past is no longer seen. Moreover the riches of the East are no longer so striking in comparison with the riches of the West as they were of old. For in days before machine industry the surplus wealth of the few was roughly in proportion to the number of people in the labouring class who were able to contribute to it and the population of India was many times greater than the population of western countries. There is every reason to suppose that the average wealth per head in India today is higher than in the times described as constituting the Golden Age.

A second fallacy common among those who glory in the past at the expense of the present is to take all the achievements in the realms of art, literature, or science extending over hundreds of years and to exhibit the glory of them in comparison with the poverty of achievement in the present age By an effort of the imagination the work of hundreds of years is telescoped so as to appear concentrated in the Golden Age. No wonder the present seems to shrivel into insignificance and we are led to sigh for the restoration of the times of old.

It is perhaps unnecessary to pursue this aspect of the subject further. Enough has been said to expose the paucity of historic authority and the confused character of the reasoning with which the belief in a Golden Age is supported. But sometimes, indeed probably in the majority of cases, the superior condition of the people in the past is not associated with the distant times of the Vedic age or the Buddhist period, but rather with the times more or less immediately preceding British rule. This superiority is indicated in such phrases as that now the Indian people are predominantly employed in agriculture while two hundred years ago they were largely engaged on flourishing manufactures; or, that the peasantry of India are today sunk in indebtedness while formerly there was no such body of debt; or, a comparison is drawn between the records of the plenty of the food supplies and the lowness of prices remarked on by the travellers of the 16th and 17th centuries and the high prices of the present day; or, the assertions of certain writers to the effect that famines are now more frequent and severe than of old are pointed to. The burden of these contrasts is that the people are today worse off than two or three hundred years ago. I have no space here to discuss the antitheses that I have suggested, but I will unhesitatingly declare that no competent student of Indian economic history will accept them as evidence of the better economic condition of the mass of the people in former times. Every such student knows how difficult it is to institute a valid comparison of this nature. I am far from asserting that the Indian people today are, so far as the rank and file of the population are concerned, more prosperous in all ways than ever before. I believe that during the disturbed times of the 18th and early nineteenth centuries the Indian peasantry in many parts of India experienced exceptional hardships. But I believe that it is incontestable that, taking a broad view, and including the sum of conditions, the present is, by Indians, to be preferred to any preceding age. It offers an opportunity for progress that was never before presented and the dominant attitude of mind should be one of "Looking Forward" and not of "Looking Backward." The past can and ought not to be reproduced. I will conclude this article by a further reference to Mr. Lajpat Rai's book. At the end of the chapter from which I have already quoted he seems to have forgotten the existence of a Golden Age altogether and he describes the character of historic development in words with which few will quarrel. "During her many centuries of political development, India was undoubtedly as good and as bad as the other evolving nations on the face of mother earth. She prospered under her beneficent rulers and suffered under her bad ones. She had periods of progress, as well as of stagnation. She had times of peace as well as of war Her rulers were by no means immaculate. Her people were not always happy. They faced tyranny and oppression as often as good government and orderly justice....It is futile to pass judgment upon the India of the sixteenth century from the pinnacle of twentieth century standards." The belief in a Golden Age, or, to express it in the more common form, the belief that India once was rich but now is poor, is a prejudice and a superstition. It clogs the mind and distorts the judgment and it should be the aim of all dispassionate students to dispel it.

THE PERSONAL DISTRIBUTION OF WEALTH AND INCOME

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The purpose of the present article is to discuss the theoretical aspects of the division of income among the persons of a community, as the final article in the series which began in the October 1923 issue of the *Indian Journal of Economics*. In the first article of this series we pointed out that while close relationship exists between this problem and that of the distribution of the value-proceeds of industry among the factors of production, they are nevertheless distinct problems. "Thus the incomes of different classes of the population is closely bound up with their occupations—as landholders, labourers, managers or uncertainty-bearers, or capital furnishers or creditors. The income to landholders must be the amount paid by industry for the use of land, and that to labourers the amount paid as wages (inclusive, of course, of rent or wages accruing to oneself when he utilizes his own labour or land). On the other hand, factoral distribution is not concerned with how many landlords there are—whether the amount paid for land is divided among fifty or fifty thousand persons. Again, one person may receive rent from land, interest on bonds he holds and wages for his labour—a fact which is of importance in considering personal distribution but has nothing to do with factoral distribution. Moreover, there is a great secondary distribution of incomes apart from their reception from industry—through the family, religious organizations, friendly societies, insurance companies, and charity. The difference in point of view between personal distribution and factoral distribution is also important. The distribution of income among the population is a sociological study—tinged heavily with ideas of economic welfare. The distribution of the value-proceeds of industry to the suppliers of the factors of production is limited to problems of value—to economics as a science of price." [1]

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[1] *Indian Journal of Economics*, October 1923, p. 16.

In the following pages we shall present the thesis that the personal distribution of income depends on three factors: (1) the distribution of the value-proceeds of industry among the factors of production, (2) property institutions, and (3) the existing secondary distribution. We shall also examine each of these major influences in respect to the categories of income which we need to make, and shall then briefly examine the relation of theoretical considerations to statistical studies of the distribution of income.

I

The Influence of Factoral Distribution

In our study of the distributive shares of the value-proceeds of industry we noted that payments for raw materials, for non-durable producers' goods, for insurance premiums, and for taxes and advertising are often, even generally, made to some social or economic organization (such as a business firm or the state) and then again distributed (as costs) to various factors of production. If, since these payments are not personal income, we delete the items which are thus re-distributed from our list of distributive shares, we have the following classes of income receivers.

(1) Receivers of the purchase price of raw materials, or non-durable producers' goods, in cases when these are furnished by an individual rather than by a business or social group. E. g., the price of sand received by the owner of a sand bank, royalties on mineral properties and petroleum. [2]

(2) Receivers of wages, salaries, fees, earnings of management, and management-interest, or the return for personal services.

(3) Receivers of rents and instrument hires.

(4) Receivers of time-discount payments, or true interest.

(5) Receivers of risk-interest and risk-profit.

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[2] These are usually inculded in rent by the classical and neo-classical economists, on the ground that they are payment for the use of natural resources. Business men, however, do not call these payments rent, and contracts regarding them are not true renting contracts. There is a great difference between a royalty paid for using up a quantity of products stored in the earth, and a rent paid for the use of land, said land to be restored to the owner at a later date.

(6) Receivers of taxes and good-will outlays, when single persons, as in the case of many of the Rajas of Native States.

(7) Receivers of pure profit.

How far are these categories, derived from factoral distribution, of significance in the personal distribution of income? Were society organized into socio-economic classes according to these seven groups, they would be highly significant. In matter of fact, however, receivers of rents and instrument-hires are also commonly receivers of time-discount payments and of risk-interest and risk-profit, even in spite of the tendency of the modern joint-stock form of business organization to separate these from each other. Omitting the sixth class, which disappears in a modern state, all except the second are, generally speaking, associated with production goods: so that there are two great classes of income—income associated with personal effort, and income associated with production goods. To be sure, sometimes income of both sorts are closely intertwined, as, for example, risk-profit and wages of management. But for a great mass of mankind, income is predominantly associated either with personal services or with the furnishing of production goods.[3] With this, then, as the main classification of income derived from functional distribution, we may sub-classify each as follows: (1) income associated with personal service into (*a*) wages (*b*) salaries, (*c*) fees, (*d*) earnings of management, and (*e*) management-interest; and (2) income associated with the furnishing of production goods into (*a*) royalties and similar payments, (*b*) rents from land, (*c*) rents from buildings and other instrument goods, (*d*) risk-interest and risk-profit, and (*e*) pure profit as the result of the fortuitous use of production goods.

The next problem that faces us is this: what determines the proportion of the total value-proceeds which is assigned to each

[3] Cf. Pigou, *Economics of Welfare*, p. 703, and Dalton, *The Inequality of Incomes*, p. 172. It is significant in this connection that all economists who have seriously studied the personal distribution of income have abandoned more or less completely the income categories of the classical and neo-classical economists. See the above mentioned books; also Ely, *Outlines of Economics*, ch. xxvi, and *Property and Contract* ch. x; Fetter, *Principles of Economics*, ch. 42; Cannan, *Wealth*, ch. ix; Stamp, *British Incomes and Property*, ch. xiv; King and collaborators of the National Bureau of Economic Research, *Income in the United States*.

of these classes? what proportion as income associated with personal services, and what proportion as income associated with the furnishing of production goods? Or again, what proportion to one of the sub-classes as compared with that to another? To this our answer is brief—the principle of relative scarcity, which we have already stated as follows: if two or more factors are used in the production of any good, the factor which is scarce (relatively) will receive a high (relative) remuneration, and that which is plentiful (relatively) will receive a low (relative) remuneration.[4] From the dynamic point of view, changes from time to time in the relative scarcity will affect favorably the remuneration of the factor which is relatively more scarce than before and unfavorably the remuneration of the factor which is relatively more plentiful. Furthermore, if the factor is one which exists in units varying in quality, as in fact do all the factors of production, though perhaps agricultural and building land are the most obvious cases, the law of differential advantages comes into play, and differences in remuneration tend to be proportional to the differences in quality.

From these two principles, the law of relative scarcity and the law of differential advantages, arises a fundamental principle regarding the personal distribution of income. Those who control and furnish scarce factors of production, and those who furnish the better quality units of factors of production will tend to have larger incomes and to become richer than those who control and furnish plentiful factors of production and the poorer quality units of factors of production.

II

The Influence of Property Institutions

But who controls the plentiful factors of production and who the scarce factors ? In general, who furnish the element labour, and who the various other elements so closely related with production goods of some sort or another? The labour element, it is obvious, is well distributed among the population, for each person (excepting the aged, children, the incompetant and a few others) is both labourer and consumer. But with production goods and the factors so closely associated with them it is far otherwise. Such production goods are not inherently associated with all, or most, of the people. They might, theoretically, be equally divided among all the people, or divided in such wise that incomes from them would be equal, or they might be maintained by all the people as a group, or in other words, by the state. At any rate, the theory of the preceding section has no light to throw upon this problem, and our answer to this question must be sought in the rules which each society has made concerning the use of such production goods, that is, in the property institutions of each country.

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[4] *Indian Journal of Economics*, July 1924, p 70. Neither in that article nor in the present one have I attempted to discuss in detail the effects on the proportion of the total income accruing to the various factors of changes in time in the relative scarcity of the various factors. For a discussion of this and of the relation to it of the elasticity of the demand and supply of the various factors, see Pigou, *Economics of Welfare*, pt. v, ch. iii, and Dalton, *The Inequality of Incomes*, part iii, ch. v.

In each country such property institutions are many and various. In each country there is a certain amount of production goods to which the state lays claim, and in which it will not admit individual rights or privileges. This public property, which is nowhere of small significance or amount, is much greater in some countries than in others. Thus in Germany the railroads are public property, while in England and the United States they are not; in England and India the telegraph lines which serve the community are public property, while in the United States they are not. In Mexico and India the state claims ownership of all sub-surface land, while in the United States private ownership is permitted.

In most countries, however, by far the greater part of the property of the country is private or individual property or held by joint-stock companies or similar organizations. What principles are behind this private or individual property? First is the principle that an individual is entitled to the product of his own labour, and the correlative principle that an individual is entitled to anything which he has obtained by exchanging therefor the product of his own labour. Next comes the right of bequest, or the principle that the individual has the right to give away, either during his lifetime or at death, the product of his own labour, and the accompanying right of an individual to accept such a gift. It is probable that the right of inheritance, or the right of relatives to succeed to the property of one who dies without making a will, has its origin partly in this right to the product of one's own labour, for in many cases the children, wives and relatives have assisted in improving and preserving the property. In modern states the rights of bequest and inheritance are usually modified by the requirement that persons receiving such a bequest or inheriting property should pay a certain percentage of it to the state. This right to the product of one's own labour, and the right to exchange this product and to give it away thus account in part for the receipt by certain individuals of the types of income which are associated with production goods. The right to receive payment (1) for furnishing raw materials and non-durable production goods, (2) for furnishing durable production goods for definite lengths of time, (3) for deferring consumption, or (4) for uncertainty-bearing is clearly derived from this principle, whenever those raw materials and non-durable production goods, durable production goods, unconsumed goods or goods risked are the product of one's own labour.

But just what is the product of one's own labour ? If one digs in the ground, plants some seeds, and cultivates and harvests the resulting plants, are the plants solely the product of labour and is one thereby entitled to the entire value of the plants ? Clearly the product from such conduct may vary immensely according to the natural fertility of the land, and one might as appropriately say that the product is the result of natural resources. In fact, in this as in every other case the product is the result of labour together with the use of some natural resource: it is the joint product of nature and of man. Now as long as any natural resource exists in such quantities that everyone can have all he desires to use along with his own labour, there is no difficulty experienced in allowing each individual the full product of his labour and the use of the natural resource. But when that natural resource becomes scarce the question is at once raised, has one man any better right to its use than another? Should not all natural resources be used by all the people for the benefit of all? In other words, does the right to the product of one's own labour include the right to control natural resources with which one's labour must be combined? The answers to this question that have been made by societies through their property regulations have been many and various, and the principal socio-political conflicts of our own day center round them. It is not my purpose to go into these various answers, but merely to note the great influence of such answers on the distribution of income among the individuals of society.

Another problem, at which he have alreadv hinted, which emerges at once is that of inheritance and of receiving gifts. Does the right to the product of one's own labour, which naturally includes the right to give away that product, include the right to receive the product of another person's labour, be it ancestors or other people? Furthermore, if the right to control natural resources has been granted to individuals, does this include the right to transfer this control to others and the right of others to continue to exercise such control? In brief, can natural resources and other forms of capital goods be inherited, or be transferred by bequest or gift? Here again the answers of society as expressed in their regulations regarding property show wide variation.

These questions of the degree of private property to be permitted in natural resources, and the degree to which inheritance of both natural and man-made resources is permitted are by no means all of the difficult questions in connection with property rights. It is not possible here to deal with them all—such as property rights in human beings, now everywhere condemned, or the exact distinction between real and personal property, or the allowing of private property in certain kinds of natural resources and not in others, or the special problems connected with private property in agricultural and building land, in mineral resources, in streams and waterfalls. We have noted the major problems sufficiently for our present purpose, and enough to make one generalization regarding the distribution of income among the people. It is this: that the personal distribution of the share of the national dividend which, according to the principles of factoral distribution, is closely associated with the possession and utilization of production goods is determined mainly by the laws and customs regarding public and private property. The answer to the questions, who receives the shares known as rent, interest and profits, among how many people are they divided, and the consequent question as to the cause of the great inequality of incomes are best answered by reference to the property regulations of each country, and especially by reference to the amount of private property allowed in various kinds of natural resources and to the degree of inheritance permitted. [5]

III

The Influence of Secondary Distribution

We have now discussed briefly the distribution of the value-product of industry among the people of the community, or rather, among that part of the population which furnish productive agents or factors of production. This by no means embraces the whole population, as it includes only the workers of all sorts and the furnishers of property or of enterprise. The whole population, however, shares in using the product of industry, the earners relinquishing a considerable share of their income to others. The means by which this re-distribution, or secondary distribution, takes place are these: (1) through the family, (2) through the state, (3) through gifts and (4) through gambling, fraud and force.

Throughout most of the world the family is the unit of social life, and therefore the principal unit in the consumption of economic goods. A large part, if not all, the earnings of the various members of the family goes into the family purse to be spent in large part for joint expenses and in large part for those who are not earners. The actual use-distribution of the income from industry is far different than the direct distribution of this same income among those who have furnished factors in the productive process. In this respect, again, as in the case of property regulations, society differs greatly in different countries. In Europe and in the United States the typical family is the husband, wife and children, though there is often one or two parents of the husband or wife or one or two other dependents included. Among the Hindus this family includes many more members besides, and every member of the family shares in the properity or adversity of every other member. The joint-family thus creates a more equal use-distribution of income than the individual family.

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[5] For more elaborate and excellent discussions of property and its influence on the distribution of income, see J. Stuart Mill, *Principles of Political Economy*, bk. ii, ch. i-ix; Dalton, *The Inequality of Incomes*; and Cannan, *Wealth*. It is a little curious that the classical and neo-classical economists after the time of Mill have almost entirely overlooked the influence of property and inheritance. W. Stanley Jevons, Sidgwick, Hadley, Marshall, Chapman, Wicksteed, Edgeworth, Smart, Clark, Carver—none of these pay more that a very slight attention to property and inheritance.

Equally important as the family in the secondary distribution of income is the state. Through its methods of obtaining revenue and its objects of expenditure, the state profoundly affects the use-distribution of income. It takes away from some and gives to others. To some extent, of course, the state may be regarded as a great producer, differing little from industrial concerns except in the fact that the things produced are necessarily or most conveniently produced by collective action (protection, for example) and that the method of payment is a fixed contribution instead of a competitive price. In some cases, as postal service, even the method of payment is substantially the same as in private business. But aside from such activities as these, and aside from its control over property rights and inheritance, there are ways in which the state transfers income from some individuals to other individuals. Such transfers may be (1) on account of civil rights, such as the right of destitute persons to maintenance at public expense, or the right of children to receive an elementary education at state expense, or the right to receive income from the state in various forms of state insurance, or (2) by way of financial policies such that revenues raised from one class of the people are spent for the benefit of another class, or (3) through the payment of interest on internal debts.

The amount of wealth and income transferred from one person to another through gifts is considerable and affects the distribution of real income to no small extent. Especially is this true in connection with the transference of property, principally to relatives, to close friends and to endowed institutions, and in connection with the services rendered to the public generally or to classes or individuals by endowed institutions. We may follow Dalton in classifying gifts as of three sorts (1) substantial gifts *inter vivos*, (2) small gifts of a charitable nature, and (3) small gifts not of a charitable nature.[6] We might also classify them in accordance with the social institutions with which they are associated, such as religious organizations, educational establishments, friendly societies, famine and calamity relief funds, and ordinary charity.

The final form of secondary distribution, through gambling, fraud and force is not, compared with the preceding forms, of such great quantitative importance. Yet in every country there are many who obtain their living by means of force or fraud, such as robbery and violence, or by selling fraudulent goods or shares of stock. The various forms of gambling also mean extraordinarily large incomes to a few and the transference of more or less income from and to hundreds of thousands of people. Another case of forcible distribution is in the case of conquests by war and of indemnities levied upon the conquered.

IV

Statistics of the Distribution of Income

The actual personal distribution of income in any country is thus the result of many and complex factors, too many and too complex to permit of an analytical determination. It is not possible to construct, from a mere statement of the causes influencing the distribution of income, a table showing what proportion of the people receive incomes larger than the average and what proportion less than the average, or a table showing the range and frequency of incomes of various sizes. The only way of accomplishing this, that is, of really finding out the actual distribution of income, is by measuring the incomes of all the people directly. It is possible, however, without such a direct measure, to find out fairly closely the primary distribution of the value-proceeds of industry as between labour and property. Professor Bowley has found that the share of the annual net product of leading English industries which is paid in rent, interest and profits (associated with property) varies from 14½% to 75%, but he believes that during the period from 1880-1913 the relative share of the total income associated with property remained fairly constant that 37½%.[7] In the United States, according to figures presented by the National Bureau of Economic Research, the share of the net value product going to entrepreneurs, investors and other owners of property used in industry varied during the years 1909 to 1918 from 44½% to 48½%.[8] This includes, however, large amounts which are properly remuneration for labour and personal services, as it includes in agriculture the share of the farm owners who usually work their own farms, and in other occupations elements which are properly wages of management. But since the ownership of property is more widespread in the United States than in England, there is probably less inequality of incomes as between persons. It is not, however, my purpose here to present the results of statistical investigations of the frequency distribution of income in various countries. Nevertheless, it does not seem proper that we should close this article without a reference to the personal distribution of income in India. Yet of this we know so little that there is nothing to be said.

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[6] Dalton, *The Inequality of Incomes*, p. 181

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[7] Bowley, *Division of the Product of Industry*, pp. 42-5, and *The Change in the Distribution of the National Income*, 1880-1913, pp. 23-6.

[8] Deduced from the tables on pages 11 and 13 of *Income in the United States, II*.

REVIEWS OF BOOKS
RELATING TO INDIA

India's Demand for Transportation. BY W. E. WELD. New York: Columbia University. 1920. Pp. 127. Price: $1.25.

The book has been written with a view to emphasise the need that the author, while in India, often felt for the expansion of transportation facilities. Professor Stanley Jevons, in his series on the "Art of Economic Development," published in the past numbers of the Indian Journal of Economics, has very emphatically pointed out that one serious defect in the transportation systems of India is the lack of feeder systems to bring the outlying places in touch with big centers of commerce and trade, which are situated on the main lines. The same idea is brought to our view by Dr. Weld. Dr. Weld further suggests that to bring the produce of the rural areas to cities as well as to facilitate mobility of traffic between villages, and to co-ordinate the various forms of transportation in the country, each province should have a Department of Transportation, which should be in close touch with the Departments of Industries, Agriculture, and Co-operative societies. The chief function of this department will be: (1) to study the standard of living with reference to supply of commodities which are not produced in a particular locality or in the immediate vicinity; (2) to study the surplusses of production within the locality and the ability of people to find satisfactory markets, in connection with which the general movement of goods should be noted and an effort should be made to discover the reasons why these movements of goods take the particular direction they do; (3) to make an estimate of the existing supply of transport facilities in each locality and their adequacy in light of actual or potential growth in production.

The suggestion is a welcome one but it needs the addition of a small proviso: it is not clear from Dr. Weld's discussion of the subject whether he would have carried out all this investigation work by an agency independent of, but working under the guidance of this new department such as the existing district and municipal boards and other rural agencies, or a new staff would have to be organised as part of the department for this work. Personally, we should prefer the former as a more economical and more efficient alternative. In this connection Dr. Weld is very enthusiastic about "the rural moter express" which is defined as "the motor truck in regular, daily service over a fixed route, with a definite schedule of stops and changes, gathering farm produce....and delivering them to a city dealer, and on the return trip carrying merchandise, machinery, etc. for farmers and others along the route."

True the need of feeder systems is very great and urgent in India and yet we feel that the time has not yet come for feeders of this kind; and that for one reason, the uneven distribution of population. In India the city population so far is only about 6%, and the cities are few and far between and they draw their supplies of milk, ghee and vegetables from villages situated about them, say within a radius of 3 or 4 miles, and for their present needs the supply is quite enough. Therefore the chances are that the motor truck service will be starved for want of traffic. If we had a large number of cities dotted all over the country, then there would be more chance that the motor truck system would become successful. But under the existing circumstances, chances of success are not very hopeful. We do not deny that the introduction of a motor truck system would be very useful to the farmer in the rural areas but unless it is worked by a philanthropic or state agency completely unmindful of profit and loss, it would not be a success under the existing circumstances. As things are at present there is a very great room for the development of feeder railway lines for there are very many areas completely cut off from the main lines.

Dr. Weld has given us a masterly discussion of the "Economics of Transportation" in Chapter I and it would be mere justice to say that his treatment of the principles underlying the devolopment of transportation is by far the best that we have come across so far. In chapter II a historical sketch of the means of tranportation in India is given. Here we should have liked that the author had gone further than the year 1914, for the book is already somewhat out of date: otherwise it is a very useful publication, and we recommend it very strongly to students of transportation in India.

B. G. BHATNAGER.

Proceedings of the Seventh Indian Economic Conference. Bombay. Indian Economic Association. 1924. Pp. 201. Price: Rs. 2.

This is a collection of twenty-one papers read and discussed before the Seventh Annual Conference of the Indian Economic Association, embracing as many as fourteen independent subjects. But the centre of interest of the conference seems to have been the papers on fiscal and currency policy in India. First of these is the paper on fiscal policy entitled "British Imperial Economic Relations" by Prof. A. J. Saunders. Professor Saunders is for Imperial Preference for India. He says: "The attitude that we must all develop is live and let live, give and take, mutual benefits for all. The question is: if India is allowed preference in jute and cotton goods by Britain will she not allow corresponding preference to Britain in machinery, steel goods and glass-ware? The time has surely come when we should formulate a policy of Imperial Economic relations which shall aim at developing and protecting the resources of the Empire. And we can do that if we will agree to stand and work together as free and equal members of a great world empire." To this appeal there was one unanimous answer from the Indian members of the Conference, and that may well be summed up in the words of Mr. J. A. Wadia of Bombay: "Before we can talk of Imperial Preference, we must have fiscal freedom. Unless we can get fiscal freedom no other question as to the brotherhood of nations and all belonging to the same empire matters."

The burden of Sardar Kibes' paper may be summed in these words: "It is a glaring anomaly in the economic life of India that the subjects of the Indian States are taxed by the British Indian institutions, not only without the consent of the people taxed, but also without that of the sovereigns of those states." The answer to this was again provided by Mr. J. A. Wadia who maintained that the native states could not bring forward any plea for a share in the customs revenue of the Government of India. They did not share in the expenses for the army and the navy and could not share in the receipts from the customs. The third paper, "Export Duties and Protection," by Mr. Subbarama Iyer, may be taken as an expression of his individual opinions on the main recommendations of the Fiscal Commission as regards export duties. It doesn't seem to have attracted much notice of the conference, as it did not provoke any discussion. The paper by Dr. Bupendra Nath Basu on "Agricultural Improvements in India" gives us a brief synopsis of the various proposals that have been often put forward by various writers on the subject. By no stretch of imagination can we say that it has broken any new ground, and that is perhaps why it invited no discussion. In his paper on "Agricultural vs. Industrial Development in India" Prof. R. M. Joshi has done a valuable service to this country by pointing out that what India needs is not either the development of agriculture alone or the development of manufacturing industries only but a simultaneous and harmonious development of both. "For genuine agricultural development itself, what is wanted, is, the industrial development of a country on modern lines. The two are complimentary rather than antagonistic." The paper seems to have evoked a wide interest and we are sure that it deserved it. In his paper on "Housing of the Working Classes" Rao Bahadur Mr. S. S. Talmaki has emphasised the need of better houses in the city of Bombay. Professor H. L. Kaji's paper on "Distributive Cooperative Societies in India" discusses the causes of the want of success of non-credit cooperation in India. Mr. C. Gopal Menon in his paper 'The Dawn of Economic Science' gives us a brief resume of the development of economic science and points out the changes that have come about in the scope of the science from the days of classical economists to the times of Alfred Marshall. Mr. K. C. Rama Krishnan, in his paper, "The Problem of Poor Relief in India," has tried to draw the attention of the students of economics to the need of a further study of the problem of pauperism in India. In the next paper, "Supply of Labour to the Madras Cotton and Other Intustries," Mr. P. S. Lokanathan gives us an idea of how labour is recruited in Madras factories. Mr. G. Findlay Shirras in his paper, "India's Real Balance of Trade in 1922-23," gives us a masterly exposition of the various items under exports and imports both visible and invisible that have to be taken into consideration while calculating the real balance of trade of a country.

Now we have reached the second important group of papers, the papers on Indian currency and exchange; and these seem to have received the greatest attention of the members present. First of these, "A Comparative Study of the Gold Exchange Standard During and After the War" by Prof. B. R. Chatterji, gives us a comparative study of the gold exchange standard as it worked in India and in Siam, and from his arguments he seems to think that we in India should aim at perfecting the gold exchange standard rather than at introducing the gold standard with gold in active circulation. The second entitled "The Government of India and its Currency Policy" by Profs. P. A. Wadia and G. N. Joshi, after crying down the gold exchange standard system and its sponsers with all the rhetoric at the command of the authors, but much less of logic, recommends with great warmth of advocacy the immediate introduction of gold currency in this country. The paper may be taken as a good example of the well-known cry of the mythological child for the moon. However this is our individual opinion. The paper seems to have been very well received by the majority of the members present and as such must be dubbed a success. The third paper of the series entitled "The Gold Exchange Standard of India" by Mr. T. J. Kumaraswami is of like quality and goes a step further, as it not only recommends the immediate introduction of gold currency, but also says that we must judiciously dispose of the existing stock of silver and must go back to the old ratio of 1s. 4d and so on. The next paper on "Excise Policy in Southern India" by Dr. John Matthai discusses the existing licensing method which according to him has proved a failure in bringing about a perceptible reduction in the consumption of liquor in the presidency. To take its place he would have none of such drastic remedies as prohibition, and would leave the problem of the reduction of the alcohol habit to public opinion. Mr. T. K. Doraiswamy Iyer in his paper, "Some Aspects of Indigenous Banking in Madras Presidency," discusses the method by which indigenous banking and the modern joint-stock banking may be co-ordinated. In his paper on "New Methods of Teaching Economics and Stimulating Economic Research" Prof. S. N. Pherwani recommends certain very important methods for the study of economic science. In his paper "Indian Economics" Dr. Prafulla Chandra Basu indicates the line along which the economist in India must work in attacking its economic problems. Mr. B. G. Bhatnager in his paper on "The Trend of Indian Thought in Economics" has made an attempt to show that Indian thought in economics is evolving on lines peculiar to the genius of the people of the country. He has pointed out some of the peculiar lines of thought that are struggling their way through the expressed and implied word of the younger students of economics in India. Prof. C. J. Hamilton in rather a lengthy paper on "The Population Problem in India" has discussed the question, is Indian over-populated, and comes to this conclusion that, "the excess of population is shown by the rapid reaction of death-rate upon favourable circumstances."

B. G. BHATNAGAR.

The Problem of The Rupee—Its Origin and Its Solution. By B. R. AMBEDKAR. London: P. S. King & Sons, Ltd. 1923. Pp. xv, 309. Price. 15s.

Practically all books are written with a purpose, and it is the business of the reviewer first to find out the object aimed at by the author. The book under review is one of those where it is rather difficult to get at the aim of the author. In one sense, it may be taken as a history of Indian currency, because from the first to the last page there is very little besides historical matter, but to judge it merely as such would not be quite fair to the author as he seems to have utilized the historical facts to prove the unwisdom of introduciing a silver standard in India. This, perhaps, may be taken as the object of the author in writing this book and as such we feel pleasure in saying that the writer has done exceedingly well.

The book is divided into seven chapters with a foreword by professor Edwin Cannan of the University of London School of Economics. In Chapter I an attempt is made to give the chief historical facts regarding Indian currency from the days of Akbar to the days of the East India Company in 1835, when gold was finally demonetised and India started on the road to silver monometallism. In Chapter II the history of the silver standard from 1835 to 1873 is given and the fact of its instability is brought out with great force. In Chapter III the evils of instability are discussed and illustrated by taking actual examples from the history of silver currency in India. In Chapter IV, the history of the various attempts made by the Government of India to secure the gold standard is dealt with, and it is clearly shown how in the beginning the prejudice of England stood in the way of India adopting a gold standard, even after the serious and continued fall in the price of silver had discredited that metal as a medium of circulation in practically all the important countries of the world. But the financial difficulties of the Government of India compelled them to adopt a gold standard and to close the mints to the public for the coinage of silver in 1893. The various facts leading to the appointment of the Hershall Committee and the closing of Indian Mints to the free coinage of silver have been very lucidly explained: but the claim of the author, which he has made in the Preface, that "the existing treatises on Indian Currency do not give any idea, at least an adequate idea, of the circumstances which let to the reforms of 1893," seems to be very large indeed; more especially when we remember having read an admirable treatment of this side of the subject in Findlay Shirras, "Indian Currency and Banking." In Chapter V, the history of Indian currency from 1893 to the close of the nineteenth century and the various steps that led, or rather, that in the opinion of the author seem to have led, to the change from a gold standard, as recommended by Hershall and Fowler Committees and accepted by the Government of India to be their definte policy, to a gold exchange standard, is given. It is from this chapter that the historical aspect of the book subordinated to the desire conclusively to prove that it was foolish to adopt the rupee as the standard and the full legal tender coin of India. In Chapter VI, the facts of Indian Currency from the begining of this century to the year 1922 are brought out, but all with the definite object of proving the instability of the exchange standard. In Chapter VII the same subject-matter is continued and the author has proved that the introduction of the rupee in India as the standard coin has been a continued evil, and that so long as it continues to be the standard coin, the country will continue to suffer from dislocation of currency in one way or another. "Only the complete stoppage of the rupee coinage will remove the Governmental interference in the management of Indian Currency; and it is this that therefore we must ask for. Queer as it may seem, safety lies in an inconvertible rupee with a fixed limit of issue."

The problem when should the remedy suggested by the author be put in operation is not attempted, although to us at least it is one of the live problems at the moment. Most of us who have ever seriously thought of the problem of Currency and Exchange in India have come definitely to this opinion that the gold exchange standard "with its note printed on silver" as its chief medium of internal circulation should go, and that the rupee should be relegated to the position of a subsidiary coin. So far there is nothing new or revolutionary in the conclusion of the author, but his opinion on the point when this should be done would have been very valuable but unfortunately on this point he is altogether silent. B. G. BHATNAGAR.

The System of Financial Administration in British India. By P. K. Wattal. Bombay: The Times of India. 1923. Pp. 412. Price: Rs. 10.

"This book," to quote the author's own words, "is intended for the use of the students of Indian public finance and others who wish to study the financial system but have not the time to go through the multifarious departmental codes and regulations and Government resolutions in which the desired information is to be found." Every one who goes through the book will no doubt agree with us when we say that the author has gathered together a body of information on Indian financial machinery and placed it for ready reference, at the disposal of all interested in the subject.

The book has been written from the descriptive point of view. It describes the system of finance as it has obtained in India particularly after the introduction of the Reforms. It is divided into two parts: part I deals with central finance and part II with provincial finance. At the end is attached a number of appendices containing specimen budget forms and rules forming the expenditure powers of the Government of India, the allocation of railway expenditure by (Provincial) Governments on transferred and reserved subjects and financial powers of (Provincial) governments acting as agents of the Governor-General in Council. We are of opinion that a chapter or two on Municipal and District Board finance would have considerably added to the worth of this book.

Both the parts into which the book is divided are very well written. They tell everything about the financial system that is worth telling. The first part after giving us in one chapter a rapid view of the financial powers of the Secretary of State, of the Government of India and the Audit Department, admirably delineates in four chapters, the whole career of the budget from its birth to its execution. Then we are supplied full information about irrigation and railway finance, about the national debt, about the cash balances, the resource operations and the system of audit and account.

The second part first traces the history of provincial finance from a date prior to the passing of the Regulating Act of 1773 to the present day, thus pointing out the financial relations of the Central Government to the Provincial Governments and then gives us an exhaustive account of the powers of Provincial Governments (including the Legislative Councils) over the budget, over revenue and expenditure, over borrowing and over accounts.

All the chapters are thoroughly clear and afford interesting and informing reading. This value is greatly increased by the author clearly explaining various terms employed at one point or another in the financial organization and noting points of similarity and difference between the English and the Indian financial systems. There is, however, one thing in regard to which we would like to say a word. The book is meant to be a purely descriptive one ; and in a purely descriptive book there should be no room for arguments in favour of or against a point as it has come to exist. and if arguments for and against one thing are given they should also be given as regards other things. But this principle does not seem to have been followed. For example, the pros and cons of the budget are placed before the reader but when we come to the sections dealing with the location of the Gold Standard Reserve and Democratic Finance we find that only one side of the picture is presented and that is not the non-official or Indian side.

This is a very minor defect. if it is a defect at all. It does not take away anything from the value of the book which we regard as an important contribution to the literature on Indian public finance—the more so because it deals with an aspect of the subject which has hitherto remained practically untouched. We are sure the students of Indian Finance and others interested in the subject will immensely appreciate the volume. We accord it a hearty welcome.

G D. K.

REVIEWS OF BOOKS

ENGLISH AND FOREIGN

The Problem of Population. By HAROLD COX. London: Jonathan Cape. 1922. Pp. 198. Price: 6*s*.

In any popular discussion of the population problem it is reasonably safe to predict that one of three positions will be taken up by the disputants. Perhaps the most prevalent view is that which may be described as economic fatalism. It rests on two deep-rooted qualities of human nature: the individual dislike of interference with the desire for marriage and parenthood, and the instinct of self-preservation which leads any given group to seek safety in numbers. It resents any attempt to check population by devices designed for that purpose. When confronted by the suggestion that an excess of population may lead to poverty or famine refuge is taken behind established theological doctrines such as are embodied in the saying, "The Lord will provide," or the command, "Be fruitful and multiply." Economic argument is thus tacitly put on one side and treated as irrelevant. To the plea that unrestrained procreation must end in disaster no intellectual defence is offered. To the suggestion of possible social evils that may arise from overpopulation a deaf ear is turned and peace is found in a fatalistic belief in divine purpose.

The second position commonly adopted on the population question may be described as that of economic optimism. The reasons for the prevalence of this view are very similar to those which account for economic fatalism, but the arguments with which it is defended are definitely economic rather than ethical or theological. Experience, it is maintained, does not convict nature of that "niggardliness" with which crabbed persons accuse her. The so-called law of "Diminishing Returns" is laughed out of court as a figment of the classical economists' imagination. Even if it be grudgingly allowed to have some validity in the short run and in old countries, are there not undreamed of inventions and discoveries as well as undeveloped lands from which the food supplies of an indefinitely large population can be obtained as the need arises? Probably the majority of more or less educated people accept the view here described, or a mixture of the two views of economic fatalism and economic optimism.

The third view might be called that of economic pessimism, or, possibly more appropriately, economic rationalism. Putting aside all presupposition as regards divine intention it lays stress on the need for some further check upon the growth of population than is now in force and declares that so long as the existing checks alone are operating large sections of mankind will be inevitably condemned to a condition of poverty and disease.

It is a great misfortune that popular opinions on the subject of population are for the most part based on prejudice and preconception rather than upon a dispassionate examination of the facts. To many the alleged tendency to excessive numbers appears to threaten the belief in a divine governance of human affairs or to conflict with the teaching of inspired scriptures. Such a view is hastily condemned as "athiestic." By others the ascription of poverty to overpopulation is rejected because they are ardent social or political reformers who desire to throw the blame for present suffering on the existing defects of the economic or political system. But to prejudge the issue in this way is fatal to the discovery and admission of the truth. The question is one of profound importance to the future wellbeing of society which at least demands the most patient and impartial investigation. The subject is a most complex one and has to be studied from many points of view. But that it calls for the most careful consideration at the present time no competent economist can deny.

In the volume under review Mr. Harold Cox urges the imperative necessity, both for the alleviation of present economic suffering and for the future improvement of human society, of practising birth control as a means to check the increase of population in modern states. The foundation of his case is laid in the first chapter of his book on the "Arithmetic of the Problem." It is essentially the same as that which played so important a part in the argument of Malthus. It consists in contrasting the potentiality of increase of living organisms with the impossibility of maintaining a similar growth in the means of subsistence which depend in the last resort upon the extensity of land "As any growing thing increases in size its rate of growth must decline; for otherwise an impossible figure would quickly be reached." Put in concrete form the necessity for restraint is shown by the facts of the English population. "The population (of England and Wales) just doubled in the first fifty years of the nineteenth century. It doubled again in the sixty years ending 1911. Towards the end of that persod numbers of people began to express alarm at the decline in the birth rate. But very little arithmetic is needed to show that if the population of England and Wales were to continue to double every sixty years, from 1911 onwards, in something less than 360 years it would reach the almost inconceivable total of 2,304,000,000, or five hundred millions more than the present estimated population of the whole globe."

This passage brings vividly to the mind the impossibility for population to go on increasing for any length of time even at the present moderate

rate The thesis is irrefutable and disposes finally of those who vaguely imagine that population should be encouraged to increase at a "natural" rate.

It will be obvious, however, that to admit that it will be impossible for the population of the world to go on increasing indefinitely implies no judgment regarding the question whether it is excessive at the present time or whether the tendency to increase is in fact restrained by poverty and disease. It is in this connection that the difficulty arises in the interpretation of facts. Mr. Cox really avoids this difficulty by ignoring it. He rather accepts the fact that "population is beating against the bounds of subsistence" as patent and in doing so certainly exposes himself to the criticism that he is taking for granted what many people hold to be the chief issue. He is dealing with the question primarily from the English standpoint and he appears to have no doubt that at the present time England is suffering from overpopulation. But the only criterion by which he reaches this conclusion would seem to be a very fallacious one. He remarks· "It may truly be said that in many countries the available resources are already used so fully that there is very little margin left. Some countries may be described as already over-full. That is to say that the existing population cannot maintain itself upon the resources of the territory which it occupies. In this sense England is certainly over-full.' But few people would accept the proposition that the right economic organisation of the world is for each country to be wholly self-supporting. It is probable that this condition will be realised in an increasing degree, but for some long time to come England is justified in assuming that she will be able to maintain no inconsiderable part of her population through the gains from international trade. Mr. Cox strongly condemns the tendency for huge populations to be aggregated in towns and this he sees to be the result in large measure of the industrialisation by means of which England supports her large population. A reduction in population may be necessary in the interests of a healthy life but it can scarcely be taken as proved.

While it may be permitted to criticise Mr. Cox for an incomplete treatment of the subject in these respects, it is at the same time to be insisted that such criticism does not seriously detract from the merit of his book. His primary object is to combat the chief arguments of the opponents of the practice of birth control. He wishes to form a new public opinion on this important branch of conduct. Whatever may be the present condition of any particular country there can be no doubt that the world cannot for long contend with the evil of poverty without recourse to an intelligent and widely applied method for limiting the population and what stands in the way of the acceptance of such a method is the current belief in certain ideas. It is the chief purpose of the book to dispel these ideas. Most common is the belief that it is a moral duty for married people to have children without limitation by artifical means. In the absence of a high death rate from disease or poverty this can only lead, as follows from the "arithmetic of the case," to impossibly large numbers. The old fashioned remedy propounded by the classical economists was abstention from marriage. But to abstain to the necessary extent would, as Mr. Cox argues, be incompatible with either the physical or social well-being of mankind. For some time to come there will be large undeveloped areas to which it might be thought that the surplus population from old countries could be sent. But Mr. Cox points out that "the mere physical difficulty of transport makes it impracticable to move any appreciable portion of the excess population of Great Britain to the Antipodes or even to Canada. There are not ships enough in existence to transport human beings at the rate that would be necessary to deal, not only with the actual population, but also with the annual growth in that population." One of the most obvious evils of a too rapidly growing population is that it serves as a direct incentive to war. Mr. Cox by quotation from German sources has no difficulty in showing that behind the spirit of imperialism and aggression has been the belief in the need for room for a rapidly growing population. "In order," said a well known German writer, "to live and to lead a healthy and joyous life we need a vast extent of fresh arable land. This is what Imperialism must give us." And, if overpopulation is an incentive to international aggression, so is it an enemy of social progress. "If the ordinary man and woman are to win sufficient freedom from the drudgery of routine industry, sufficient leisure for the education and cultivation of the taste and interests which enrich personality and raise the value of life, this can only be obtained on condition of some limitation of the number of mouths to be fed and bodies to be clothed and housed."

Having argued that an unregulated increase of population must provoke a high death rate immediately resulting from poverty and disease, that it is one of the greatest incentives to war, that it is incompatible with any large measure of social progress, and that relief on the part of old and over-populated countries cannot be found in a policy of emigration, Mr. Cox finally discusses the ethics of birth control. He has no difficulty in showing that as far as Europe is concerned the greatest opponents of this practice shelter themselves behind the scriptural teaching of the Bible. He has equally little difficulty in demonstrating that such teaching is based on the practice of Jewish tribes living under conditions entirely different from those of modern England. He shows that the best minds of the English Church no longer admit the validity of isolated texts as guides to modern conduct on such matters. Thus he quotes the Bishop of Birmingham who not long ago publicly said that "What a nation needed was not an unlimited number of citizens, but a sufficient number of the best quality. Morally, as well as eugenically, it was right for people in certain circumstances to use harmless means to control the birth rate."

Mr. Cox has written a book that is not intended to be a scientific study of the subject. Many important aspects of the problem are ignored. But he has put in a convincing way a number of considerations that are well calculated to strengthen the forces making for a rational control of the birth rate as against those which encourage the people to pursue the thoughtless and unjustifiable conduct associated with orthodox teaching.

C. J. HAMILTON.

Behind and Before. Two Essays on the Relation of History, Politics and Eugenistic Warnings. BY W. E HEITLAND. London: Cambridge University Press. 1924. Pp. xv, 166. Price: 6s.

In the first of these essays the author has discussed the use of historical facts and phenomena to the present day politician. In seeking to indicate the difficulty of applying the lessons of history to the practical problems of politics he has pointed out two sources of error. One of these is the temptation to ignore or insufficiently to recognise the open or latent forces of tradition and circumstance that were operative at the moment under review. The point is that judging the past with a view to draw conclusions for the present requires a full appreciation of silent influences as well as of those openly expressed. Furthermore, it is hard to discover exactly at what moment a new influence began to work. The historian is confronted with a task of peculiar delicacy. By laying undue stress on the visions of some isolated theorist he may antedate the working of a cause that a little later was undoubtedly operative. By assuming too readily that a cause undoubtedly operative later was in fact not working at a given earlier date, he may assign a disproportionate value to influences that were failing and almost spent. What we need, therefore, is, "that our statesman and our good citizen each in their several degrees shall realise the infinite variety of circumstance and the relativity of opinions and policy both past and present. If historical study furnishes them with this equipment it will surely help them toward a cool and sound judgment of the issues as they arise. For convenience sake, this desirable condition of mind thus produced may be labelled orientation."

After thus pointing out the need and the limitations of historical study to the average politician and citizen the author applies himself to the question: "how can student courses be so organised as to aid in a practical solution?" He doesn't think that the present system of cram and examinations succeeds in bringing about "Orientation." What he considers desirable is "that the average student should follow the subject with lively interest and should not be bewildered by too wide a range of subjects. Therefore it is important that the material through which the average student is conducted should not be excessive in bulk."

Having secured the right type of citizen so essential to modern democracies the author applies himself to the question: "can we secure the rule of the real majority?" In this connection he discusses the use of mandates, referendum, and other devices adopted to secure *vox-populi*, as the determining factor in the business of the state, and ultimately comes to this conclusion that human nature being what it is, it is not possible to secure the rule of the majority. As things are at present, the world must continue to be governed by what are known as the "leaders."

This brings us to the second essay, wherein he discusses the significance of the eugenists' theories to the problem of democracy of to-day. On one hand, even democracy needs its leaders, *i. e.* its governing class; on the other, it presupposes a higher standard of political instinct in the masses without which no democracy can function properly. Both these are problems about which the theories of biology, as applied in the yet undeveloped art of eugenics, have something to say. "The biologists, inspired by the scientific study of breeding in animals and plants, are convinced that the fitness or unfitness of living things to carry on their several functions is only to be explained in connection with heredity. Parents normally transmit their qualities to their offspring, and careful experiments in breeding indicate that transmission follows ascertainable laws." Accordingly, when the biologist turns to the present human society—a society inspired by the modern democratic ideal of equality—he is appalled at the spectacle. He finds that his conclusions are simply ignored. Already he can detect the evil consequence of this policy of heedless drifting; and fears that if it is allowed to continue then it is only a question how soon civilisation will totter to a final crash. According to the biologist we are living "on experiments blindly and hastily conducted, the assumption underlying which is an equality undefined—an equality which science has no choice but to deny."

The author admits the presence of classes, and also admits the necessity for maintaining governing classes, but asks a few pertinent questions. "Is not the division of society into three classes, upper, middle and lower, imperfect? Does not the so-called lower class include very various elements which it is unscientific to confuse? Do not its better elements produce citizens of high quality; sometimes of distinguished merit? And what evidence is there that the men risen from their ranks do lower the morale of the governing class? Again whence did the upper classes come? Would it be wise to aim at keeping them in power by artificial means as we once did the land-owners? would an infusion of men risen from below seriously lower their mental and moral average? I dare not affirm it." The author believes that "though the criticisms of biologists and social students on the condition and prospects of civilized western people are in the main just—there is no sufficient reason for believing that the evils indicated could not be overcome by deliberate and sufficient effort."

We have tried to give in brief some idea of the leading subject matter of this very interesting book, but we wonder if a review of this kind can do full justice to it. In it are raised such vital issues, and these issues are treated so scientifically, that it merits a first-hand study by all those interested in the problems of our day.

B. G. BHATNAGER.

Social Problems and Social Policy. By JAMES FORD. New York: Ginn and Company. 1923. Pp. 1027.

The object of the editor in bringing out this volume which forms part of the admirable Series "Selections and documents in Economics" is "to bring together the best of contemporary ethical theory and the best of contemporary practice in order to suggest the measures by which the moral aims of society are being or may be progressively achieved, and in particular to outline the principles underlying the treatment and prevention of poverty, defectiveness and criminality."

Part 1. The volume borrows its statements of social purpose and social criteria from various contemporary schools of ethics.

Part 2. Comprises statements of social method drawn from statistical science, pedagogy, psychology, economics, philanthropy, sociology, law, political science, and biology.

Parts 3, 4 and 5. Apply the principles outlined in parts 1 and 2 to the problems of defectiveness, poverty and crime. They set forth the methods of social work followed in the Western Countries, specially the United States and the United Kingdom, The editor has discharged his task so well that we have no hesitation in saying that the book will remain indispensable alike to the social worker and the student of civics.

It is a commonplace that modern civilized society is a very complex structure, and in order to grasp the real causes of the various troubles which afflict humanity we have to go far deeper than the superficial circumstances of any case might warrant, and it is absolutely necessary to avail ourselves of the conclusions arrived at by such sciences of human life as psychology, physiology, biology, economics, sociology, and eugenics. For instance, what may appear only as an economic problem on the surface will on deeper enquiry be found to have been generated by other causes due to physiological, psychological, hereditary or environmental defects. Hence the cure and the prevention of social evils must take account of all the present day knowledge of social sciences. It has further to be noted that in the west, apart from private constructive philanthropy, legislation has been one of the chief agencies by which the conscience of the community has been brought to bear upon social problems. The latter part of the nineteenth and the beginning of the twentieth century have witnessed a striking expansion of state activity and legislation in the field of social reform. Parts 3, 4 and 5 of this volume give a most instructive account of the methods and the amount of work done by the state for the treatment of the defective, the dependent and the delinquent classes in the western countries, and a study of these methods cannot fail to stimulate the Indian reader to consider what can be done by the State for similar classes in India.

Particular attention may be invited to Part 4 which deals with the conditions and causes of poverty and unemployment and the methods of eliminating them as followed in the west and the relation between voluntary and state agencies. In this connection it need hardly be said that there is a splendid field in our country for the carrying out of a careful investigation into the social conditions of typical villages on the lines adopted by Booth and Rowntree in England.

The volume is a mine of information on all these and the allied topics and it is eminently adapted for the purpose not only of bringing home to the student the importance of his social environment but also of creating a desire in him to contribute to the values of life.

E. ABHAYAMBAL.

Economic Problems of Democracy. BY A. T. HADLEY. Cambridge: University Press. 1923. Pp. 160. Price 6s.

In the six lectures, which make up the book, Dr. Hadley has attempted to show the economic problems that the American democracy has had to face, and the lines along which their solution must be sought. He has done this in order to help other popular governments, like those of Great

Britain and France, to face similar problems that arise in this industrial age. These lectures illustrate how closely economic problems are intertwined with their legal and political, ethical and above all educational setting. Dr. Hadley brings out very clearly the relativity of all economic doctrines to the regional, resources, industrial development and cultural advancement of a people in a particular stage of world history. It shows how 'time makes ancient good uncouth.' In fact time has come when relative economics must recognise that there are conditions of increasing, stable, and diminishing returns for most of the economic policies advocated. Thus where the productive efficiency of a nation with vast resources has suffered from abuse of authority or privilege, it is quite a good policy to recommend ideas of free competition, liberty, individualism etc. But when there are no longer any free natural resources, and when individualism has developed to a certain extent under the free impulse, and there has been accumulation of capital, and large scale production has been established, a time comes when free competiton ends in a combine between capitalists, which induces union between labourers, and gives rise to strikes and a consequent retardation of productive efficiency and industrial progress. It is time then to discipline the developed individualism by training the group in better social outlook through education, by enforcing the social viewpoint through the courts, and making the service motive replace the profit motive in industry.

Lecture first deals with "democracies old and new." Modern democracies are far larger units than older ones. They are national while the older ones were civic. Again 'after the invention of fire arms, war itself is becoming an industrial problem to be solved by a superior preparation in chemistry and economics, instead of a contest to be won merely by superior courage and intelligence in an emergency.' The central problem for modern democracies under these conditions is "how to train a free people to *work* voluntarily, side by side and yet with due subordination, in the same way that Greece and Italy trained free people to *fight* voluntarily side by side and with due subordination." As war has largely become an industrial problem, so also each industrial problem in its turn is largely an educational one. It arises from defective past training of a people, and continues because the people are not able to understand the right solution placed before them nor ready to act on it. No doubt large sums of money are spent upon putting knowledge within the reach of all. "But the acquisition of knowledge is only a part of education, and not the largest or the most important part. The chief end of training in schools and in after life is the development of habits and powers and ideals—habits of discipline and self command, powers of hard and efficient work, ideals of duty which will lead a man to sacrifice present enjoyment for future honour, and personal profit for public service. We must train not only intelligent individuals but useful citizens." Now this 'public purpose in education has unfortunately been allowed to fall into the background' and with baneful results.

The next lecture deals with 'economic freedom.' Dr. Hadley shows how America in the first phase of its development presented the best situation where "the economic principle of competition, and the political maxim of laissez-faire had their fullest development, and showed most completely their possibilities in the way of good and evil." He shows how free competition was tried in America under exceptionally favourable conditions; and, for a time, with remarkably good results in national character and national efficieny."

The third lecture shows how the comfortable theory of free competition and laissez-faire came to be disturbed by "industrial combination." In spite of favourable conditions and good results for about fifty years, "competition failed to maintain itself unimpaired in the face of the growing tendency towards industrial combination which is manifest all over the world."

'Collective bargaining in politics' forms the subject of the fourth lecture. In that Dr. Hadley tries to show how industrial combination has been attended by political combination in America and in other countries with representative governments; how collective organisation in industry has been a powerful stimulus to collective bargaining in politics; how the so-called block system is tending to displace, and in some instances has already displaced, the party system in legislative assemblies." Parliamentary government breaks down and fails to reflect public sentiment, when each member instead of being the servant of the public, chosen to do what he thinks best for the nation, becomes an agent of a district or group, retained to represent the views of the majority in his district or group, and to promote those partial interests. "When any group of men within a nation has a group interest—usually an economic interest—which its members want to secure at almost any price, and for whose realisation they are prepared to sacrifice the national ideas and policies for which their party stands, the character of parliamentary Government changes at once. For if such a group holds the balance of power, it is no longer possible for the leaders of either party to appeal to a majority in a parliament or in congress for the support of the measure which they desire to carry out. While they are in power they are at the mercy of a minority, and if they go out of power the leaders of what was formerly the opposition will be no better off than they were. An administration belonging to either party will be compelled to buy support by consenting to measures devised by the organised clique. The most successful statesman will be the one who can keep the largest block or group of blocks of votes together, at the least sacrifice of principles." "When the people are taking thought for public interest, parliamentary government is probably the best government in the world. When large groups of people are concerned for their own several group interests, and let the public interests fall into the background, it may prove the very worst."

In the fifth lecture on "National Animosity" Dr Hadley has shown how under the operation of several new factors, the cosmopolitan attitude of the early nineteenth century has given place to the narrow nationalism of the twentieth. Thus the increase of fixed capital, diminished reliance on free competition and growth of national feelings have led to commercial isolation, high tariffs, and protectionist policy among different nations. Among the Americans these mean a "change from self-reliance to reliance on government, from belief in open competition to distrust of open competition, from welcoming the foreigner as a customer to fearing the foreigner as a rival or an enemy."

Lecture sixth deals with "Class consciousness and public opinion." "Class consciousness" we are told "in its early stages means that the members of a social or economic group are so impressed with their moral superiority to the rest of the community, that they care relatively little what the rest of the community thinks or what becomes of it. In the later stages it means that they become so absorbed in the wishes and aspirations of their own group, that they mistake these for facts and acquire a mental blindness, which prevents them from taking any other kinds of facts into account. Racial solidarity is class consciousness applied on a wider scale—pooled self esteem—as Mr. Clutton-Brock so aptly calls it. The more this class consciousness is developed the harder it will be for a democracy to deal with internal politics; the more this racial solidarity is developed the harder it will be for it to deal with international politics. For if the people are to govern the people must see facts as they really are. Class consciousness can be combated by the removal of certain wrong ideas and practices and the giving of right education. The two wrong ideas that need to be removed are first the belief on the part of capitalists that property right is something sacred and second the belief on the part of working classes that labour creates value. Now property right is not a sacred thing set apart or consecrated as an end in itself. It is an institution which has grown up for the benefit of society as a whole, and taken different forms to meet the needs of different ages Similarly it is not all labour that creates value, It is only "socially necessary" labour rightly applied that is a part creator of value. In addition to the removal of these intellectual barriers, the emotional barriers between classes should be removed by creating public opinion against ostentatious expenditure or 'conspicuous waste' on the part of the rich. Such expenditure creates envy and prevents the diffusion of the habit of saving "If the rich spend money foolishly it is vain to expect the poor will be wiser than they. Again, business should become really and truly a profession in which success is measured by service rendered rather than by money received." The change from old ethics about property to new ethics should be made through the instrumentality of law courts, which should hold the traditional and sociological requirements in proper balance. And lastly we must make provision for giving the voters as a body the elements of a liberal education in the true sense of the word—an education which fits them for the exercise of liberty civil and political. The difference between bad education and good education may be summed up by saying that bad education teaches us to know, while good education teaches us to know how—how to find things, to judge things and above all, to do things. Technical education trains a man to find and judge and do what is necessary in his calling; liberal education trains a man to find and judge and do what is necessary in the exercise of his liberty as a citizen."

"If we can get back to the habit of regarding education as a training in self-reliance we can accomplish many things. For the boy who has been trained in school to habits of self-reliant thought will not allow his business or political connections in after life to blind him to the necessity of finding out things for himself. He will not be content to take his ideas second hand from the newspaper that he likes or from the public speaker who appeals to prejudice. On the ability of the citizens as a body to entertain the appeal from prejudice to reason, from class interest and class consciousness to national interest and national consciousness, the very existence a democracy depends."

Such the important subjects dealt with by Dr. Hadley. Competitive industrialism, dealt with under the heading "Economic Freedom," industrial combination, with its features of combination among owners of industrjal establishments, and labour unions and strikes, collective bargaining in politics, national and class animosities, are all phenomena that can be witnessed in any of our metropolitan and even smaller industrial cities. They are live issues amongst us. To those who seek to understand these, and read for themselves the riddle of social arrangements, derangements and rearrangements, this book should be welcome. To the students of economics, it shows the importance of relating the validity of economic theories to their wider social and natural setting. Economic doctrines apart from regional peculiarities, stage of industrial development, political setting, ethical ideals and the educational advance of a group are apt to be misleading. If our young students and older ones too can learn to view their subject from this larger social perspective it will indeed be a great gain.

S. N. PHERWANI.

The Acquisitive Society. BY R. H. TAWNEY. London: G. Bell & Sons. 1921. Pp. 242. Price: 4s. 6d.

"The Acquisitive Society" was first published by the Fabian Society, as a pamphlet, under the name "The Sickness of an Acquisitive Society." When it was later published for sale it bore the present, apparently less revolutionary, title. In this book Mr. R. H. Tawney tells us what is the matter with the present economic order, draws an idealist's picture of that same society as it should be, and guides us along the paths supposed to bridge the two. For the day is past when an idealist need not at the same time be a practical man.

The fundamental thesis is that economic society today is based on rights, whereas it should be based on function. This divorce of rights from function rests upon society's conviction first, that property is held by absolute right, and secondly, that it can not, in fairness, limit opportunities of economic enterprise; and hence society has been unable to attach obligatory functions to the privileges of tenure of property and economic enterprise. This is the *acquisitive society* because its whole interest is the acquisition of wealth. On the other hand, "a society. . . .which inquired first not what men possess, but what they can make or create or achieve might be called a *functional society*."

Subordinate to this thesis, explaining why and establishing how "economic activity shall embody and express the idea of social purpose" there are scattered through the two hundred and fifty pages of the book many interesting theories and conclusions. Some of the most noteworthy are these.

Industrialism "is the confusion of one minor department of life with the whole of life. When manufacturers cry and cut themselves with knives, because it is proposed that boys and girls of fourteen shall attend school for eight hours a week, and the President of the Board of Education is so gravely impressed by their apprehensions that he at once allows the hours to be reduced to seven, and then suspend the system altogether, that is Industrialism."

Private property *per se* is not outlawed. "It is not private ownership but private ownership divorced from work which is corrupting to the principle of industry." According to this standard quasi-rents, monopoly profits, urban ground rents, and royalties stand condemned. Royalties particularly receive the scathing denunciation of the author.

The present industrial slavery is intolerable. Those who direct and govern must be responsible to those who are directed and governed. Industry must be organized as a profession—all professions resting upon duties rather than upon rights—with the responsibility for maintaining the service devolving upon the workers. Capitalists, as controllers of industry, will become extinct. The process may be nationalization or it may not. The Building Guilds in England buy their capital, obtaining it in the cheapest market and do not therefore hand over the control of their industry to the owners of the said capital. Capitalists, being owners of only one factor of production, have overstepped their proper sphere. Not how capital is owned but how it is administered is important. The purpose of the workers in an industry is production; the purpose of the business interests controlling it is profits. This division of purpose must be abolished. The worker can not be condemned for always wanting more so long as there are profits. Higher wages does not solve the problem of industrial freedom.

In the final chapter Mr. Tawney sums up his position: that property shall be maintained only when accompanied by function; that the workers shall be directly responsible to the consumers whose interest is service, not to the shareholders whose interest is gain; that, subject only to the criticism of the consumer, the professional organization shall be responsible for the maintenance of the service. Industry and property and economic activity should be treated as functions, and should be tested, at every point, by their relation to a social purpose. Anticipating the criticism of our materialistic age, he urges, "Sentimental idealism? But consider the alternative. The alternative is war; and continuous war must, sooner or later, mean something like the destruction of civilazation."

No reader of this interesting diagnosis of society's ills can fail to be charmed by the virile and delightful style in which it is written. Figures of speech, original and arresting, lighten almost every page. The lash of sarcasm is administered with humour. Such sentences as these concerning mine owners: "The alchemy by which a gentleman who has never seen a coal mine distills the contents of that place of gloom into elegant chambers in London and a house in the country is not a monopoly of royalty owners." "We shall, in short, treat mineral owners and absentee landowners as Plato would have treated the poets, whom, in their ability to make something out of nothing and to bewitch mankind with words, they a little resemble, and crown them with flowers and usher them politely out of the State." "The owners of mines and minerals, in their new role as protectors of the poor, lament the 'selfishness' of the miners, as though nothing but pure philanthropy had hitherto caused profits and royalties to be reluctantly accepted by themselves."

As a whole, the book is a well-written appeal of an idealist for our age of industry to pause to consider ends and fundamentals.

OLIVE I. REDDICK.

Elementary Economics. By THOMAS NIXON CARVER. New York: Ginn and Co. 1920. Pp. 397. Price: 8s. 6d.

Professor Carver has added one more to the long list of books which seek to treat the subject of Economics in an elementary manner, and he has done what he set out to do well. In many respects the present volume reminds us of the "Principles of Political Economy" by the same writer. By the beginner, however, this elementary treatise will be found much more readable. There is almost a complete absence of anything bordering on technical phraseology; the language is that of the market place. As is to be expected in such a volume, there is little of an essentially original nature. In treatment the author follows the well-beaten track, but the matter dealt with is judiciously selected and extremely well put together. Wherever possible, a bird's-eye view is given of the classification adopted in the analysis, and to the beginner this should prove of great assistance. The book, especially in the section dealing with "Production," contains a number of photographs, and amongst those dealing with primitive economic conditions the Indian student will find many with which he is familiar.

Professor Carver is much impressed with the necessity of beginning the study of Economics at an earlier stage than generally prevails. "The time to begin studying this subject in a systematic manner is when we first begin to think about public questions, that is, in early youth, for our youth are thinking about public questions and we could not stop them even if we wanted to." (Introduction). We cannot but feel that this statement is more applicable to American and English than to Indian conditions where our students begin to study Economics at an early age, and often with a most inadequate foundation in the way of history, geography and mathematics.

The material dealt with by Professor Carver is divided into seven Parts: (1) What makes a Nation Prosperous; (2) Economizing Labour; (3) The Productive Activities; (4) Exchange; (5) Dividing the Product of Industry; (6) The Consumption of Wealth; (7) Reform. The portion dealing with Exchange is somewhat 'thin'. The part which we would specially recommend to the attention of the Indian student is the first. In it an extremely good analysis is given of the factors that make for national prosperity. Great emphasis is laid on the importance of the human factor whilst geographical conditions are given their due weight. The treatment is broad; "Law and Government", "Morals and Religion" are given a prominent place on account of the influence they exercise upon "the quality of the people.' This emphasis on the importance of "immaterial capital" deserves more consideration than it generally receives in India. It reflects the reaction from the more extreme attitude of the classical economists, though it must never be forgotten that Adam Smith was not guilty of neglecting the human factor. Did he not place "the natural and acquired abilities of a people' in the category of the "fixed capital" of a nation?

Not all of us will agree with Professor Carver as to the most suitable time for a beginning being made in the systematic study of political economy. But if the start is to be made at an early stage, there is no book we should sooner see put into the hands of the student than this little volume by Professor Carver.

W. H. M.

Essentials of Economics. By FRED ROGERS FAIRCHILD. New York: American Book Company. 1923. Pp. 543.

Says the author in his preface that "the sole purpose of this book is to aid the beginner in acquiring clear and dependable knowledge of the important facts and the fundamental principles of the science of economics." Let it be said at once that he is to be congratulated on having written a book so eminently suitable for the purpose he had in view. Only an experienced teacher could have been successful in such an attempt. From beginning to end his book is a marvel of clearness of thought and clearness of expression. He compresses within 530 pages what other people are not able to say in bulkier volumes. Apart from its characteristic qualities of style, that is to say, matter that is so adequately and so lucidly expressed, it must be borne in mind that the work is thoroughly scientific and can also serve as a model for writers of text-books. The author, having through a long experience of teaching worked out for himself the simplest and the most difficult concepts of Political Economy, is able to explain them in language which leaves nothing to be desired as regards aptness and simplicity. The United Provinces Board of High School and Intermediate Education has accepted Economics as one of the subjects of study. It would be difficult indeed to place in the hands of students a better book than Dr. Fairchild's "Essentials of Economics."

The author has introduced many interesting chapters in his book *e. g.* the one on accounts and balance-sheets. He thus brings the subject into a living relation with the facts of economic life. He has a chapter on charts and curves, which are used largely throughout this book and in his hands they lose all their obscurity in play. His treatment of the general relations between demand and supply is faultless and the chapters which he devotes to the discussion of risk and the part it plays in modern business are also refreshing by their originality. If one looks away from the fact that the author's illustrations are drawn chiefly from American conditions, the book can be placed confidently in the hands of students of other countries. Pictorial illustrations, the exercises given at the end of every chapter and the references, so well graded in point of difficulty, to other works for further study are some of its other excellent features.

The only fault to be found with the book is that the author uses the reformed method of spelling and it is strange to find words which one has been taught to spell differently appearing in all the rationality of their phonetic garb. The book should be useful not only for beginners but for advanced students as well, as it would help in imparting clarity to many of their ideas.

L. K. HYDER

The Pre-War Business Cycle. By WILLIAM CHARLES SCHLUTER New York: Columbia University. 1923. Pp. 189. Price: $2.

Cycles of Unemployment. By WILLIAM A. BERRIDGE. Boston Houghton Mifflin Company. 1923. Pp. 88. Price: $1. 25

Business Fluctuations and the Labor Movement. By V. W. LANFEAR New York: Columbia University. Pp. 132.

Is Unemployment Inevitable ? London: Macmillan and Co. 1924. Pp. 388. Price: 8s. 6d.

The study of trade cycles and of business fluctuations has proceeded rapidly during the past few years. In 1919, in the first two issues of the Harvard *Review of Economic Statistics* was published Professor Persons "Indices of General Business Conditions," the most exhaustive statistical study of the sequence and regularity of events in the business cycle that has ever been made. Since that date the Harvard Committee on Economic Research has published an index of business conditions on the basis of which they have been able to make accurate forecasts of the general trend of business conditions; besides, nearly every issue of the *Review of Economic Statistics* has contained a statistical study of some phase of the business cycle. At the meeting of the American Economic Association in 1921 leading economists discussed the business cycle and the possibilities of its control. In 1922 there were published three and in 1923 no less than twelve notable volumes dealing with the business cycle[1]. A marked feature of these recent studies has been the careful investigation of other aspects of the cycle than mere trade, and especially of cyclical movements in production and employment. It seems more appropriate therefore to follow American terminology and speak of the "business cycle" rather than of the "trade cycle."

The books under review are only three out of many, and it is somewhat difficult to judge of their significance apart from others. The scope of

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[1] A. H. Hansen, *Cycles of Prosperity and Depression in the United States, Great Britain and Germany 1902-1908.* Madison, Wis.: University of Wisconsin.

F. Lavington, *The Trade Cycle. An account of the causes producing rhythmical changes in the activity of business.* London: P. S. King & Son.

M. Bouniatain, *Les crises economiques. Essai de morphologie theorie des crises economiques et de theorie de la conjuncture economique.* Translated from the Russian by J. Bernard. Paris : Giard.

G. Bernacer, *La teoria de las disponibilidades como interpretacion de las crises economicas y del problema social.* Barcelona : La Revista de Economia.

Business cycles and unemployment. Report and Recommendaiions of a committee of the President's Conference on Unemployment, including an investigation made under the auspices of the National Bureau of Economie Research. New York : McGraw-Hill Book Co.

William A Berridge, *Cycles of Unemployment in the United States 1903-1922.* Boston : Houghton Mifflin.

W. I. King, *Employment, hours and earnings in prosperity and depression : United States 1920-22.* New York : National Bureau of Economic Research.

H. L. Moore, *Generating Economic Cycles.* New York : Macmillan.

H, B. Hastings, *Costs and Profits : their relation to business cycles.* Boston : Houghton Mifflin.

J. Lescure, *Des crises generales et periodiques de surproduction.* Paris : Recueil Sirey.

W. C. Schluter, *The Pre-war Business Cycle 1907-1914.* New York: Longmans, Green and Co.

J. R. Bellerby, *The Controlling Factor in Trade Cycles.* London : P. S. King and Co.

The Stabilization of Business. Edited by Lionel D. Edie. New York : The Lacmillan Co.

V. W. Lanfear, *Business Fluctuations and the American Labor Movement.* New York : Longmans, Green and Co.

O. M. W. Sprague, *Bank Credit and Business Cycles.* Boston : Houghton Mifflin.

Schluter's "The Pre-war Business Cycle, 1907-1914" is evident from the eight chapter headings: the depression of 1908; the revival of 1909; the recurring depression of 1910-11; causes of the depression of 1910-11; the return of prosperity in 1912; the depression of 1913; the causes of the depression of 1913; and varying lengths of cycles—determining factors. In general, the history of these depressions and revivals is well written, but the mass of detail presented in 175 pages is likely to produce confusion instead of clearness to a reader not already familiar with the principal facts of the business cycle from 1907 to 1913. The facts presented are everywhere supported by tables giving yearly, quarterly or monthly data, but the book is rarely illustrated by charts or diagrams. Mr. Schluter agrees with those who believe that credit influences are paramount in respect to the length of the business cycle and that agricultural production is only one of several factors which influence credit conditions.

> In re-valuating the conclusions derived from our study of the causes of the two short business cycles between 1908 and 1913, we find considerable support for the belief that the margin of elasticity in the credit system limits the lengths of the cycles.
>
> Elastic bank credit rests primarily upon reserves, while mercantile credit and, even to a considerable extent, long-time investment operations, are based upon bank credit. Bank reserves in turn are derived from and contain, from to time, in part, the existing supply of capital, which means that a certain portion of the capital supply of a country is crystallized now and then in the form of bank reserves, primarily gold. . . . By far the greater portion of a country's capital, however, exists in the form of business capital or productive wealth. Its potential purchasing power can be translated into means of payment only through the operations of bank credit based upon reserves. The connection, then, between that portion of a country's capital existing in the form of reserves and that part which exists in the form of business capital, or productive wealth, is not far to seek. The latter requires its hand-maiden credit, primarily bank credit, to make it effective as a production agent and to make possible the flow of incomes and expenditures. (Pp. 174-5).

But this relationship is not so simple as it seems, for :

> The total supply of capital in a country can be measured only by its value expressed in monetary units, and is registered from time to time in the earning capacity of capital in terms of money profits; while profits are regulated by the vicissitudes of the margin of credit elasticity within which prices and production oscillate. Thus, business capital becomes a highly nebulous thing, based as it is upon past, present and future earnings of productive wealth. The coining of its potential purchasing power, by means of credit, is equally variable, but remains within the well defined limits set by the margin of elasticity in bank credit. . . . . .
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> The margin of elasticity in the credit system has definable limits. The course of these limits is directed, on the one hand, by the approximate minimum of credit requirements in depressions when a low level of prices

and production prevails and, on the other hand, by the expansibility of bank credit, determined by the variable quantum of capital kept in the form of bank reserves. The period 1908 to 1913 offers fairly convincing evidence that the contraction of the limits of credit elasticity was accountable for the two short cycles. (Pp 175-6).

With this conclusion we would find it difficult to disagree, in view of the facts with which Mr. Schluter supports his contention. Especially would we agree with him that "prosperity generally culminates when the limit of expansibility of bank credit has been reached." (P. 185). This was certainly true with regard to the peak of prosperity in the early part of 1920. But it is still possible that prosperity should culminate before the limit of expansibility of bank credit has been reached, as is the case with the present cycle in the United States, where the prosperity of 1923 has already spent itself and production, employment, volume of trade and prices are now decidedly on a downward trend, and all in spite of unprecedented gold reserves and interest rates on call loans as low as 2%. Nor is it clear just how "the approximate minimum of credit requirements in depressions when a low level of prices and production prevails" (p. 176) fixes the limit to the downward trend of prices and production. Thus while Mr. Schluter seems to have offered a plausible hypothesis of the lengths of the cycles between 1908 and 1913, the only part of his conclusion which can be unhesitatingly accepted as applying to business cycles is general in that the limit to the period of prosperity is determined by the limit of the expansibility of bank-credit.

William A. Berridge's "Cycles of Unemployment" is a revised edition of the essay which won the prize of one thousand dollars offered by the Pollak Foundation for Economic Research in 1921. It is the fourth out of five publications of this foundation in 1923, the others being Fisher's "Making of Index Numbers," Foster and Catchings' "Money," Hastings' "Costs and Profits," and Sprague's "Bank Credit and Business Cycles." It is a small book, devoted mainly to the construction of a single index which show "the consensus of monthly employment fluctuations in the United States better than would any other readily constructed index," for the periods 1903-1914 and 1914-1922. In doing this, all the continuous series of employment or unemployment figures available in the United States are studied and their merits and defects mentioned. Other chapters discuss the uses of an employment index, the geographical distribution of industry in the United States, employment cycles and production, employment cycles and buying power, and forecasting employment cycles. An employment index, says Mr. Berridge, has four main uses: (1) to register the course of the labour market; (2) to indicate the general course of production; (3) as an indication of *buying power*, because the total fund of purchasing power flowing into the hands of wage-earners at a given time is conditioned directly by the state of employment; and (4) to indicate the cycle of *social welfare*, because, largely as a result of fluctuations in the economic prosperity of wage-earners, there are found to be pronounced cycles of suicide, crime, prostitution, pauperism, marriages, migration, and other social problems. "In other words, the problem of cyclical employment stands in a position midway between the economic and the social phases of the business cycle; it is a connecting link. Consequently, a reliable index of employment may be expected to prove of more general use than would an index for any purely social phenomenon" (p. 4). As a barometer of industrial activity, an index of employment is of far more value than an index of prices, and Mr. Berridge finds that there is a very close correlation between his index of employment and Professor Day's index of production. Mr. Berridge is to be congratulated on his terse, clear statements and his way of presenting within small compass the results of elaborate statisticial work and complicated and refined statistical methods. Economists and statisticians, however, will be disappointed in that the author has not published his researches in more detail, so that it would be possible for someone else to check the accuracy of his deductions and to build upon his work.

V. W. Lanfear's "Business Fluctuations and the American Labor Movement" in not intended to be a study of the business cycle directly. It is allied with studies of the buciness cycle, however, and especially with studies of cyclical unemployment, for it is a monograph regarding the policies of labor in the face of business fluctuations and especially in the face of the war and post-war boom and of the depression of 1921. Mr. Lanfear divides his book into five chapters, as follows: general survey, wages and the cost of living, employment and unemployment, labor mobility and absenteeism, and changes in attitude and policies of labor, 1915-1922.

The period 1915-22 Mr. Lanfear finds to be one in some respects favorable and in some respects unfavorable to labor. Although union hourly rates failed to advance from 1917 to 1919 as fast as the cost of living, actual hourly earnings were constantly ahead of the cost of living. The principle of using the cost of living as the basis of wage rates was given a great impetus by its adoption by governmental agencies in adjusting wages during the war. In the depression of 1921, labor organizations strenuously opposed wage reductions, with partial success. Unemployment, however, was very serious, and the author, like Mr. Berridge, finds a very close correlation between unemployment and general business conditions. The influence of the business cycle on labor policies also shows itself in the number of strikes, which in 1919 involved nearly four million workers and in 1921 less than one million. The sweeping use of the injunction in these strikes, and the numerous court decisions distinctly unfavorable to labor has caused labor to lose confidence in the governmental and judicial bodies. "The organized workers no longer look upon our courts as instruments of equity, but rather as weapons of oppression." (P. 124).

It is impossible here to mention more of Mr. Lanfear's findings. Suffice it to say that his book is a very valuable one for the student of labor conditions and labor policies in recent years.

The group of English economists, and industrialists, Messrs. Astor, Bowley, Grant, Jones, Pybus, Rowntree, Spring-Rice, Stuart, and Layton, who published "The Third Winter of Unemployment" in 1923 have done the people of England a service in publishing another book, "Is Employment Inevitable—An Analysis and a Forecast." As with the preceding book, this is not a treatise on the business cycle, but the fact that a large part of the book deals with the trade cycle as the principal cause of British unemployment warrents us in reviewing it along with the above-mentioned books. The book consists of four parts, the first of which is a survey and forecast, for which the authors take responsibility, the other three parts consisting of essays by leading economists and industrialists on various appropriate topics, such as correctives of the trade cycle (Pigou), the problem of finding employment, (Cassel), the effects of currency inflation (M. Bonn), effects of the export of capital (Hobson), the future of British industry (Jones), the condition of eight of the leading industries, the future employable population of Great Britain (Bowley), regularising the demand for labour by postponing or accelerating works (Bowley and Stuart), and the effect on employment of adjusting rates of wages by index numbers (Bowley).

In the "survey and forecast" three chapters are devoted to the trade cycle, and three to the economic position of Great Britain, the future of the world's trade and Great Britain's share. There is nothing new in the description of the recent trade cycle and the discussion of the causes of the cycle and solutions therefor. These chapters are, however, an excellent summary of what is known about the genesis, sequence of events and possibilities of control of the trade cycle. As to the future of British industry and trade, the authors' conclusions can best be given in their own words. "Unless we are to undergo a disastrous and impoverishing economic revolution, our country must remain dependent upon its foreign trade. Our overseas trade in the future depends upon the volume of traffic that will sail the seas in the twentieth century, and the proportion of it that will be carried on by Great Britain. We take an optimistic view of the future growth of the world's maritime trade. . . . Britain's share of world trade will depend on her natural resources, and on technique and the efficiency of production on the side both of management and labour." We believe there is no doubt of the correctness of this conclusion, and the only weak point in Britain's position is the question of technique and efficiency of production. While the authors state that "the war has caused improvements to develop here which we believe to be as rapid and as far-reaching as those of our competitors," they recognize that "the full resources of our industrial population can only be called forth if full confidence is secured between workers and employers and if suspicion and fear and exploitation are removed." In the essays on the principal industries, particularly in the one on the coal industry, the necessity of reducing costs of production are stressed if Britain is to retain large exports. It does not seem to the reviewer that enough stress has been laid upon the introduction of new methods and new machinery in order to accomplish this reduction. Mr. Thorneycroft says: "Unfortunately the possible reduction of cost that is practicable by introduction of machinery is small." Perhaps this is true, and yet the output per worker is only about a third that in the United States, the difference being due to the greater use of machine mining in the United States. Perhaps the nature of British mines makes machine mining impracticable, but it does seem necessary radically to improve the output per worker in order both to pay a higher wage and thus make possible a higher standard of living and to reduce costs of production. Anomolous as it may seem, there is nothing which would do more to relieve Great Britain's unemployment than the rapid adoption of labour saving devices throughout all her industries, for nothing else can do as much toward lowering costs of production and retaining and increasing her share of the world's trade.

C. W.

The Principles of Industrial Welfare. By John Lee. London: Sir Isaac Pitman and Sons Ltd. 1924. Pp. viii, 93. Price: 5s.

This is one of those interesting books which give positive pleasure to the reviewer. In the words of the author it "is an attempt to show the philosophy which lies behind various welfare systems." The author believes that the welfare movement in modern industry has "within it the potentiality of exercising an immense influence of good." Like Carlyle and Ruskin the author has been touched, and for the matter of that deeply touched, as even our Mr. Gandhi is touched in India, by the callous indifference of modern industrialism to human happiness. But unlike them he is for the elimination of the defects in the system of machine production rather than for the elimination of the system itself. In this his attitude towards modern industrialism is very much the same as that of William Morris, though it lacks that artistic exhuberance which was a peculiar characteristic of that famous writer on art and industry. Morris, like Ruskin, found the corrective of modern industrialism in its use of machinery in the introduction of artistic spirit, while the author of the book under review has discovered a happy corrective of the individualistic spirit that inspires modern industry in welfare movement.

In chapter III, entitled "Search for the Foundations," the author has pointed out that so far, the object of the employer in the majority of cases in initiating welfare schemes has been to hold his workers against other employers, to tickle them with the advantages of being employed in his industry, and to undermine their will in a corporate bargaining. He has failed to grasp the central principle that true welfare should be based upon a desire to enable each worker to rise to his full stature.' We are entirely in agreement with the author on this point.

So far the schemes of welfare are always approached from the producers' point of view. The chief aim is to know how a particular scheme of welfare will influence the productive efficiency of the worker. The end of all welfare in the words of the author should be "the betterment of the human individual" and not merely of the individual as an agent of production. This peculiar attitude of the employer towards welfare schemes is largely responsible for that spirit of sullen indifference, and sometimes open hostility, which trade unions adopt towards these welfare schemes. To be a real force welfare work should be a recognition of "the Common Purpose of all production" the benefit of mankind. The moment this is done, the movement that now "seems to be a merely ameliorative movement, designed to remove this or that small difficulty, may in truth be of far greater moment." Then it will seek a spiritual relationship between owner and manager and between managers and workers which will always be developing and binding the apparently rival interests more closely together. It will have regard for something more than seeking for itself the maximum reward irrespective of the reward due to the other partner. Nor will it be contented with moderate achievements, with standard schievements, with dead leveldom of achievement. It will go right back to the days before the industrial revolution, for while it accepts aggregation and organisation, which would seem in the face of it, to neglect the individual, in very truth it would emphasize the importance of the individual. For it puts the sacredness of his physical and intellectual welfare in the foreground. In short it would bring us a little way nearer to the medieval ideal, which was that all organisation is to the end of perfecting the individual and knows no other end."

We could go on in this strain, quoting approvingly one passage after another but the exigencies of space forbid us; and the only thing that we feel bound to add is that every lover of human kind, specially the social reformers in India, people who have been moved by the terrible condition of life and labour in the industrial centres of this land, should make it a point to read this little book of ninety-three pages and we are sure they will find it intensely interesting. B G. B.

Life and Labour in the Nineteenth Century. By C. R. Fay. Cambridge: University Press. 1920: Pp. 319. Price: 20 net.

This volume contains "the substance of lectures delivered at Cambridge University in the year 1919 to students of Economics, among whom were Officers of the Royal Navy and Students from the Army of the United States." It embraces a series of twenty-two essays. The first nine deal with the period from 1815 to 1830, and the remainder with that from 1830 to the present day. Actual conditions of labour are studied in the light of the prevailing thought of the period, and much attention is given to the interaction of economic, political and religious forces upon one another.

The book is not one to be recommended to the student who is beginning the study of the history of the nineteenth century. If it is to be really appreciated, a working knowledge, at least, of the history of that period is necessary. The book has been written after a first hand study of the original sources, and is packed with references to these. In the Preface the author has included certain notes to guide the student in dealing with the primary authorities (Acts of Parliaments, Reports of Commissions, etc.) to be found in the Library of the University of Cambridge. He also gives, in a Second Index, a summary of the Acts of Parliament and other Parliamentary Papers, which should prove most valuable to the student of the original documents. It is seldom that we meet a book more calculated to promote original research, and which at the same time realises the difficulties of the beginner in this way and tries to make the path easier. But, though this seems to us one of the great claims of the book, we think the writer has been too modest in the Preface where he says: "The highest hope that can be entertained of such a book as this is that it will direct the student to other and better books." Not one of the essays will be read by even the advanced student without new light being thrown on the subject.

The language throughout is of the finest—terse and not infrequently picturesque. Take this summing up on the subject of Imperial Preference:

"In Huskisson imperialism and liberalism went hand in hand. After his death imperialism was picked up by protection, and for some years the two kept house together in uneasy and ambiguous companionship. Then came the Irish famine, and when Sir Robert Peel raided the premises, he found the couple nursing a sickling in the last stages of fiscal consumption. So perished Imperial Preference." (p. 17). Equally striking are the writer's concluding remarks as to who, or what, was responsible for the repeal of the Corn Laws. He dismisses "rotten potatoes" and Peel's conversion as "the result of *fright* at the League." "Rather, let us say that it was Time in his fulness, celebrating the majority of an infant registered in the Wealth of Nations, and fostered in his boyhood by two most estimable nurses, Mistress Huskisson and Dame Robert Peel." (p. 149).

The chapter on "The Origins of British Socialism" is extremely interesting, and brings out forcibly the indebtedness of Marx to the early English Socialist writers who wrote in revolt against the accepted theories of Ricardo. "After reading their arguments and illustrations," says Fay, "we feel that they anticipated Marx's theory of surplus value, without wrapping themselves in Marx's gloomy fatalism or supporting their theory by the argument from history." This has always been our conviction, and it is extremely difficult to account for the curious neglect which the early English Socialists suffered for many years. "It is fortunate for Marx that Bray was so little remembered." (p. 74).

Fay justifies the policy of Government which culminated in the "Six Acts of 1819," though he acknowledges that they amounted "to an almost complete suspension of the Constitution." (p. 29). One point here, it seems to us, might have received more attention, and that is the way in which these severe and repressive measures really assisted the cause of labour. Being, as Fay calls them, "an almost complete suspension of the Constitution," they broadened the field of controversy by actually challenging the traditional liberties of the people. Labour, as a result, found assistance from quarters from which it might otherwise not have been forthcoming.

The writer dealing with indebtedness in India will find interest in the quotation from Cobbett on p. 228. Writing in 1820 Cobbett placed the shopkeeper among the accursed novelties of the country-side. "What a thing it is to reflect on, that these shopkeepers have the whole of the labouring men of England constantly in their debt; have, on an average, a mortgage on their wages to the amount of five or six weeks, and make them pay any price that they choose to extort." Has not the same thing been written in our own day of the *bania* in India? And that much maligned class, the University teachers in India, may perhaps derive consolation and find cause for hope in Cobbett's equally scathing pronouncement on the University of Oxford. "One-half of the fellows who are what they call *educated* here, are unfit to be clerks in a grocer's or mercer's shop." (p. 82). Oxford had apparently not improved much since the days of Adam Smith, but its transformation within a century—and the hope that the same thing may be done here—is something that might be pointed out to those who malign the product of our Indian Universities in the daily press.

W. H. M.

The relation of British Policy to the declaration of the Monroe Doctrine. By LEONARD AKEL LAWSON. New York: Columbia 1924. Pp. 153. Price: $1.50.

No single doctrine has ever exercised a greater and more lasting influence on the destiny of a great nation as the one enunciated by President Monroe has done in the case of United States of America. For over a century the foreign policy of the United States has been governed by the Monroe doctrine. Indeed, it will be no exaggeration to say that the whole history of the United States—from the declaration of American Independence right up to date has been shaped by the principle summed up in this historic doctrine. The traditional policy of 'splendid isolation' and of the hegemony of the United States over the two Americas proved too strong even for President Wilson and he failed to get the treaty of Versailles ratified by the Senate. The American nation refused to embroil itself in "European entanglements" and to join the League of Nations although the covenant specially and specifically safe-guarded the workings of the Monroe doctrine. It cannot be without interest, therefore, to know the circumstances that gave rise to its formulation and declaration.

Dr. Lawson has chosen a very limited field for investigation, but he has done his work well. He has clearly traced the circumstances leading up to the declaration of the Monroe doctrine—the isolation of Great Britain in Europe, her commercial interest in Latin America, advisability of concerted action with America, her difficulties in the formal recognition of the independence of Spanish American States, the breakdown of Canning-Rush negotiations, the conclusion of the Canning-Paligna agreement and the consequence separate declaration of the United States of America in the form of the Monroe doctrine. Doctor Lawson has given due weight to the economic motives of Great Britain but he has kept the commercial interests of the United States in the background, otherwise he has given the facts impartially and without any American bias. He has fully recognised that although George Canning failed in his attempt to pursuade the American Government to issue a joint policy in regard to the Spanish

American colonies, and although John Quincy Adams was successful in his object of asserting the superiority of the United States on the American continents, yet the success in preventing France and her European Allies from interfering in Latin America was due— not to any action of the United States—but to Britain's possession of the largest navy in the world. European statesman could easily afford to igneore the Monroe Dontrine, but they could not, as Mr. Chateaubriand, the French Minister of Foreign Affairs at the time, put it, "risk rupture with the cabinet of St. James on this colonial question."

Dr. Lawson has been able to prove conclusively two points which are of great significance. Students of modern history are aware of the important part played by economic interests in international affairs, but Dr. Lawson brings it home to us by citing facts and figures and by showing how the British policy in regard to Spanish America was dictated almost wholly by commercial interest. The *Examiner* of 8th February, 1824, contains a passage which analyses the motives of the British Government beautifully and fearlessly:—

"The whole secret, however, of playing fast and loose with South America is this: our government is trying to trim between Legitimacy on on the one hand, and its own commercial interests on the other. In principle, the invasion of South America would be no worse than the conquest of Spain; but then, as Mr. Brougham said, the former would touch our *pockets*, would be a fearful blow to British manufactures, trade, and *revenue*. Hence this sudden respect for liberty and the independence of states—this horror of foreign powers interfering—this resolution to form a barrier against such interference."

The second point clearly demonstrated by Dr. Lawson is, that verbal declarations are of no avail in the international world—what matters is force—military or naval power (now, of course air and submarine force have to be added). Says Dr. Lawson: "Not the United States, but England was the real barrier to allied intervention in Spanish America. Her possession of the largest navy in the world gave practical effectiveness to her own opposition as expressed in the Canning—Polignae agreement, as well as to that of the United States as expressed in the Monroe Doctrine."

Another matter that may interest the readers of the *Indian Journal of Economics* is the "new conception of the relation of government and business" which was new at the time but which is quite familiar to us these days, especialy in India (*e. g.*, who does not know of the influence of Manchester and Lancashire manufactures and merchants on Indian Fiscal policy ?). The shipowners and merchants of Liverpool, the merchants and manufacturers of the city of Glasgow, the Manchester Chamber of Commerce "petitsoned the government to improve the political relations between England and Latin America." They put pressure on the government and made insistent demands for the recognition of new states in the interest of commerce. And the *London Times* declared, that "the mercantile body has an indefeasible claim upon the government, that its fears should be tranquillized, its judgment guided, and its interests in every way protected."

GURMUKH N. SINGH.

Economics for Commercial Students. By ALBERT CREW. London: Gordon and Sons Ltd. 1923. Pp. XVI, 422, 8. Price: 5s.

Mr. Crew has approached the subject so admirably and has put what he has to say in such clear terms that the book will be greatly appreciated by any beginner who wants to have an idea of topics that are generally included in a book on Economics. The outstanding feature of this book is that the author has included in a separate section facts regarding the economic History of England which will give the students a brief idea about the economic condition of that country from the Norman times. The addition of a section on History and Development of Economic Theory should make the book more useful to the students of Economics. Lastly the inclusion of Examination Questions in the book itself will be of great help to those who want to appear in various university examinations.

M. K. GHOSH.

English Public Finance. BY HARVEY E. FISK. New York: Bankers Trust Company. 1920. Pp. 241.

French Public Finance. BY HARVEY E. FISK. New York: Bankers, Trust Company. 1922. Pp. 363.

The Bankers Trust Company of New York are doing a very commendable piece of work in issuing authoritative books on one branch of economics or another. The above two books are a testimony to that work.

Both the books are descriptive. They are, in essentials, written on the same line and naturally so because they are concerned with the same subject in relation to two separate countries. The first book can be easily divided into three parts interconnected with one another. The first part is made up of chapters I-VI, the second part of Chapters VII-XXIII, and the third art of the remaining chapters.

The first part describes the financial drama as it was enacted in the United Kingdom from the declaration of war on August 4, 1914 to the presentation of the budget on April 1920. It tells us of the various emergency measures which were taken immediately after the war was declared to ensure the safety and the progress of the banking and mercantile communities as well as of the methods which were resorted to to finance the war, pointing in this connection to the part played by the banks in this stupendous task.

The second part relates to the history of English finance from 1061—1914 thus giving us an insight into how the English financial system developed into what we find today. This part while explaining in chapters VII-XI crown finance from the time of William the Conqueror (1061) to that of the glorious revolution (1688) adds a chapter (chapter XII) on constitutional development brought on by the control of the purse and then goes on to narrate the evolution of the modern organisation and administration of the English Financial System.

A third part is taken up with a recital of the story of banks and banking in the United Kingdom with special reference to the growth of the Bank of England.

The second book like the first one practically falls into the same number of divisions. Its first part consists of chapters I-XI. Chapter I is by the way of introduction and gives the cost of the "armed peace" which prevailed in Europe between 1823-1913 to the important nations of that continent. Chapters II-VII deal with the War and post-war finance—which latter means the way in which the French are facing the problem of repairing havoc wrought by the Germans in their country. Chapter X compares the international revenues, expenditures, costs of war and debts during the period 1914-22, and Chapter XI discusses the War Indemnity which Germany levied on France in consequence of the defeat of the latter in the Franco-German War of 1870. The second part, Chap. XII- XIX, of this book is unlike the second part of the first book in so far as it is not historical, but it is like that in so far is it is descriptive. It describes the financial organisation and administration of France as it is today including chapters on how France is governed and on her local finance.

The third part, the remaining chapters, is concerned with the same sort of topics as the third part of the preceeding volume, viz., a discussion of banks and banking in France including chapters on agricultural and savings banks.

Both books are extremely lucid and the publishers have in the forewords to them assured us of their authoritative character. They contain a large number of tables of figures of revenue, expnditure, costs, debts and exchange quotations, " French Public Finance" having further a number of maps and curves—all which are of great use and interest.

G. K. D.

The A B C of the Federal Reserve System. By EDWIN WALTER KEMMERER. Princeton, N. J.: Princeton University Press. 1922. Pp. 215. Price: $1.50.

The Federal Reserve System. By HENRY PARKER WILLIS. New York: The Ronald Press Company. 1923. Pp. 1765. Price: $10.

If one wishes to study the central bank or reserve bank system of the United States, which was initiated in 1913, one can do no better than to study carefully these two books. The first mentioned is a revised edition of Professor Kemmerer's book first published tn 1918, and since recognized as the standard book explaining briefly the functions and organization of the Federal Reserve System and the powers and duties of the Federal Reserve Banks. The fact that this is the fifth edition is sufficient evidence of the merit of the book.

There is probably no one so competent to write regarding the legislation, organization and operation of the Federal Reserve System as Mr. Willis, for he is not only a trained economist and an experienced teacher, but he has also been in close connection with the federal reserve system ever since its beginning. Expert advisor to the congressional committee on banking and currency while the creation of the system was before congress, chairman of the Technical Committee on Organization, secretary of the Federal Reserve Board, director of the division of analysis, and consulting economist—these are the positions which he has successively held,

The book is divided into three parts—legislation, organization, and operation—in which Mr. Willis discusses in considerable detail the events which led up to the passing of the Federal Reserve Act, the many proposals which preceded that act, the political factors involved, the problems of organization, the changes which have been made in the Act, and in the organization of the system, the development of the system during the war and its connection with the financing of the war, the relation of the system to the rising prices of 1919 and the falling prices of 1920 and 1921, its relation to agricultural credit, and the possibilities and dangers of the system in the future.

It is, of course, not possible to summarize in a short review the conclusions from such a lengthy book, but we may be permitted to quote from the final chapter on " Retrospect and Prospect." " During the past eight years, the Federal Reserve System, in common with other banking organizations, has lived through a succession of changes such as otherwise might not have been encountered in the course of a century. It has compressed into a short space many varieties of experience and, in a measure at least, has been able to profit by them, though not of course to the degree that would have been realized had these experiences been spread over a longer period It is, at all events, a fact that a turning point in the history of the federal rererve system has now been reached; and that within the next year or two, probably, conclusions will be arrived at which will in an important degree condition the future development and service of the new banking system. The period of war finance, so far as the federal reserve system is most materially concerned, has been brought practically to a close and the question how the system can be fitted into a normal environment is now uppermost....The federal reserve system has not accomplished the main objects for which it was intended and in so far as it has achieved success in any direction it has become unpopular. By the side of this first and pessimistic conclusion must be placed the fact that the system has rendered far more distinctive services to the country within a short period of years than its inaugurators had ever any right to expect."

In the two years that have elapsed since these words were written there has been less criticism of the system and probably less political influence upon it than in 1921 and 1922. Yet it is still too soon to say that it has outlived the attacks upon it, Were Mr. Willis writing now he would probably say that it seems more secure and more likely of serving the country well than it did two years ago, but that its future is still undetermined. The system seems to be subject to two dangers—the one of being influenced too much by politics especially through political appointments on the Federal Reserve Board; and the other of being influenced too much by the banking and financial interests which own the stock of the reserve banks and too little by the Federal Reserve Board.

In conclusion, we can recommend no better book in respect to the United States to advanced students of banking who are inquiring into the various central banking systems of the world.

C. W.

Currency and Credit. By R. G. Hawtrey. London: Longmans, Green & Co. 1924. Pp. 442. Price: 15s.

Stabilisation. By E. M. H. Lloyd. London: George Allen & Unwin. 1923. Pp. 128. Price: 4s. 6d.

Mr. Hawtrey's book, now in the second edition, (the first was published in 1919), is undoubtedly a very valuable addition to the existing literature on monetary theory. It is exhaustive in its scope, lucid in exposition and fully in touch with the every day activities of industry and trade wherefrom its illustrations are drawn.

The author starts with an analysis of the nature of credit independently of money and arrives at a revised definition of money, viz., that "it is the means established by law (or custom) for the payment of debts." That money is a medium of exchange and that it is a standard of value are thus shown to be things which are consequential in their character. In fact, the whole treatment of the subject in the book goes to show how money is really subsidiary to credit, at any rate in countries like Great Britain and the United States with highly developed systems of deposit banking, where purchasing power is created and extinguished in the form of credit, and where even gold fresh from the mines goes first to the banks in exchange for credit and is issued in the form of coins to customers if and when they ask the banks for the same. In view of all this, the author would have more correctly named his book as "credit and currency" instead of the more orthodox "currency and credit" which he has chosen as its title.

In a series of chapters the author deals thoroughly with "Metallic Money", "Paper Money and the Quantity Theory", "the Foreign Exchanges", "the Theory of Banking", etc., so as not to exclude the discussion of the principles underlying the working of any important part of the modern monetary and credit mechanism both in its national and international aspects. It would be impossible even briefly to summarise the lines of argument or the conclusions of the various chapters. It is indeed the usual ground which is covered but the author has his own way of covering that ground and his viewpoint, as pointed out above, is different.

Mr. Hawtrey has made two important contributions to monetary theory, viz., (1) his doctrine of a Money of Account as distinct from the legal tender money and (2) his theory of "the unspent margin." To arrive at the conception of a money of account, he says, "it is necessary to understand that an undischarged debt due from a solvent debtor is, from the standpoint of the creditor, purchasing power. There being a demand for purchasing power *as such*, purchasing power commands a value like any other right over wealth. The money of account provides the unit in which debts are legally expressed, and the same unit, being used to express prices, provides a common denominator for the measurement of the relative values of purchasing power on the one hand and commodities or services on the other." The unit of account ought not to be confused with the metallic standard. The latter may change. At one time, the English pound sterling meant 4995 grains of fine silver. By repeated debasements it was brought down to 1719 grains in 1601. Since 1816 it has meant 113 grains of fine gold. Yet it is always the same pound sterling.

"The unspent margin" is the unspent purchasing power in circulation in the aggregate. It may be held by people either in the form of money or of bank credits, the extent of each depending on the habits of the people and on their convenience. The proportion of the one form to the other depends on economic conditions. Mr. Hawtrey enunciates the Quantity Theory of Money with reference to the unspent margin and says that the theory "merely equates the uuspent margin of purchasing power, which is a total of monetary units, to the command over wealth which the people hold in reserve."

Mr. Hawtrey's analysis of financial crises is extremely illuminating. "Credit," he says, "is by nature unruly. It is always straining at its tether, or rather, it is perpetually starting to run away, and then being pulled up with a jerk when the limit of inflation consistent with the maintenance of the metallic standard is reached." A crisis is a struggle to maintain the standard of value. It is actually caused by a general fall of prices, which means a *rise* in the value of the monetary unit. Its predisposing cause is excessive credit expansion leading to a general rise of prices which is the same thing as a *fall* in the value of the monetary unit. If the credit contraction which inevitably has to follow were not excessive, as it natually tends to be, nor too sudden, there is no reason why a crisis could not be prevented.

The historical portion of Mr. Hawtrey's book is no less important than the theoretical and is meant to illustrate the latter. In it Mr. Hawtrey has given the history of the currencies of most of the leading countries of the world and the history has been brought up to date. Among other things, the Indian gold exchange standard is there, and though it is merely a ststatement of events with a certain amount of criticism on one or two despatches of the Government of India, some Indian readers of the book are likely to halt at certain passages in the statement, e. g. at the description at the attempt in 1899 to "force sovereigns into circulation" in India, or at the mention of the recommendation of the Babington Smith Committee to tie the rupee to *gold* instead of to *sterling* and to adopt the ratio of two shillings. Mr. Hawtrey has no comment to make on either of those two episodes.

Mr. Lloyd's book on "stabilisation" is a useful contribution to the discussion of a problem which at present is uppermost in the minds of monetary theorists and practical business men as also of the statesmen of Europe and America, viz., the stabilisation of the values of the monetary units of the respective countries. The fluctuations that have occurred in the purchasing power of gold during the last three years have made people realize the necessity of finding out ways of regulating the value of gold as the slow depreciation of that metal over long periods never did. The systematic study of the phenomenon of trade cycles by the leading economists in this century had undoubtedly begun to draw a certain amount of public attention to this question, but the Great war and its aftermath, the trade boom of 1919-20 and the subsequent depression and unemployment, have made the problem of stabilisation quite a live one.

The first half of Mr. Lloyd's book is a forceful plea in favour of using the discount rate of the Bank of England for the purpose of regulating the volume of money in circulation. But the Bank rate, he says, should be raised or lowered, not merely to regulate the flow of gold, inward or outward, as before the war, but to maintain the general level of prices as nearly stable as possible. Mr. Lloyd is quite sure that, "as before the war, changes in the London Bank rate will virtually determine monetary conditions is all the principal countries." It is of course assumed that the gold standard will in the first place be restored in Great Britain. Mr. Lloyd, however must not be understood to advocate solitary action by Great Britain to achieve the aim. He wants Britain to take the lead and bring about, first, a European Consortium, somewhat on the lines of the Latin Monetary Union, and, then, to establish a satisfactory understanding between this Consortium and the Federal Reserve Board of the United States. The Consortium is to mobilise the gold reserves in the vanlts of the various European Banks of Issue and each central Bank is then to aim at stabilising its currency at its new gold parity, and all Central Banks are to pursue a common discount policy. Mr. Lloyd claims, and rightly too, that in this scheme he proposes nothing more than the Conference of the representatives of thirty-one Governments did at Genoa in May 1922. Genoa resolutions were directed to a general return to the gold standard and to provide among other things for the future regulation of credit with a view to preventing undue fluctuations in the purchasing power of gold, The fixation of certain limits for these fluctuations, on the analogy of the specie points, on the basis of an agreed index number is quite a feasible proposition to advance. By raising or lowering the discount rate and by the purchase or sale of Government securities in the open markets, the central Banks should be in a position to control credit sufficiently to be able achieve stabilisation within the agreed limits. To expect international co-operation to this extent in the immediate future may appear too sanguine to some people, but the benefits to be derived from stabilisation, in the form of prevention of the periodical paroxysms from which industry and trade suffer in every leading country of the world to-day, are so undeniable that the attempt is worth making; and a lead given by Britain, still the financial centre of the world, would undoubtedly go a great way in that direction.

The second half of Mr. Lloyd's book is devoted to the elaboration of a plan of international co-operation and control for the purpose of achieving stabilisation of prices of certain basic raw materials and foodstuffs such as coal, petroleum, wheat, sugar, wool, cotton, rubber, nitrates, which are commodities in universal and fairly constant demand.

In the case of rubber and tea, attempts at control of the world price through control of the whole or the major portion of the world production have, as is well known, been successfully made, though it is doubtful whether the consumers felt as happy as the producers did as a result thereof. The powers of organisation of Governments too, were discovered in the great war to be surprisingly great. So then, Mr. Lloyd's proposals in this respect are by no means impracticable. The question, however, remains whether in face of the economic rivalries of the leading manufacturing countries of the world, sufficient co-operation would be forthcoming to secure stabilisation of prices, with the probable corollary of an equitable distribution of the available supplies among the various parties. It is doubtful, too, whether the producers of these basic materials in the backward countries would view with favour such a concerted attempt by the advanced countries to control the prices of their produce.

R. M. JOSHI.

A History of Commerce. By CLIVE DAY. New York: Longmans, Green & Co. 1923. Pp. 676. Price: 14s.

We welcome this revised and enlarged edition of Clive Day's "History of Commerce, the last edition of which has been in the market since 1914. That edition, as the date of its publication indicates, traced the history of commerce from prehistoric times to about the year 1913. But it was really up to the end of the last century that we were given full particulars. A small chapter of 12 pages headed "Recent Commercial Development" brought the narrative up to 1913. Between this year and 1923, the date of the publication of the present edition, there is an interval of ten years—an interval during which has taken place the greatest catastrophe, the Great War, the world has ever experienced, with far-reaching results on commerce as on other aspects of world's affairs. There was a great need for pointing out these results. Mr. Clive Day has supplied the need so far as commerce goes in the present volume. The last chapters of the old edition, Chapters LI-LIII, have been revised so as to bring their contents up to 1914. The chapter on the recent commercial development has been omitted, and replaced by a new part, part VI, called "World War." This is divided into five chapters covering the history of commerce during the war and two or three years immediately following.

To B. Com. students of Indian Universities who have taken up history of commerce as one of the subjects for the B. Com. Degree, this edition will be particularly welcome. Their course extends up to the current year. But there was no one book available from which they could get information about the period 1914-23. The book under review will supply them with all they need.

We need not say that the old edition was regarded as the best text book on the subject as far as it went. The new edition will now be the best textbook on the subject up to date.

G. D. K.

CURRENT NOTES

OURSELVES

As noted in these columms in our last issue, the *Indian Journal of Economics* has now become the organ of the Indian Economic Association as a result of an agreement between that body and the Department of Economics of the Allahabad University. While the editorial work on the present issue has been done by the retiring Editorial Staff, the names of the new Editorial Board appear on our cover, and it is with pleasure that we introduce this new Board to our readers. For the benefit of our foreign readers we may state that Mr. C. J. Hamilton is Professor of Economics at Patna College, Mr. W. H. Myles is Professor of Economics in the University of the Punjab, Mr. John Matthai is Professor of Indian Economics in the University of Madras, and Mr. C. D. Thompson is Professor of Economics at the Ewing Christian College and a part-time teacher in the University of Allahabad. Mr. S. K. Rudra, who now takes over the Managing Editorship, is Reader in Economics in the University of Allahabad.

THE INDIAN ECONOMIC ASSOCIATION

The eighth Annual Economic Conference, to be held under the anspices of the Indian Economic Association, will be be held at the Benares Hindu University from the 4th to the 7th of January 1925. The subjects selected for discussion are the following: (1) Indian tax system (Central) Provincial and local); (2) taxable capacity of India; (3) Central and Provincial relations; (4) industrial finance in India, and (5) the creation of an Indian mercantile marine.

A number of papers on these subjects have already been received by the Editorial Board, and will be printed for circulation at the conference. The proceedings of the Conference, together with the papers presented, will be published in a later issue of the *Indian Journal of Economics*.

ALLAHABAD UNIVERSITY DEPARTMENT OF ECONOMICS

We are glad to welcome the return of Professor Burnett-Hurst, Head of the Department of Economics, Commerce and Geography of this University, from his year's leave in England.

C. A. W.

RECENT PERIODICALS

ENGLISH AND AMERICAN

JOURNAL OF THE ROYAL STATISTICAL SOCIETY

May 1924

The Census of Production. By A. W. FLUX.
Publicity in Industrial Accounts. By Sir ARTHUR LOWES-DICKINSON.

July 1924

The Vital Statistics of Sweden and England and Wales. By MAJOR GREENWOOD.
Enquiry by Sample: an Experiment and its Results. By JOHN HILTON.

THE BANKERS' MAGAZINE

July 1924

Soviet Currency and Its Reform.

THE JOURNAL OF POLITICAL ECONOMY

August 1924

The British Coal Agreement. By JAMES A. BOWIE.
Taxation in British Columbia. By S. E. BECKETT.
Agriculture and Price Stabilization. II. By WILLIAM R CAMP.
Psychology in Economic Theory. By A. J. SNOW.

ECONOMICA

February 1924

Mr. Keynes' Evidence for Over-Population. By Sir WILLIAM BEVERIDGE.
"Total Utility" and "Consumer's Surplus." By E. CANNAN.
The Entrepreneur Myth. By M. H. DOBB.
Wage Disparities in British Industries. By J. F. W. ROWE.

June 1924

Consumer's Surplus: A Reply. By D. H. MACGREGOR.
Recent Theories of Currency Reform. By T. E. GREGORY.
Agreements in Restraint of Trade. By ARNOLD D. MCNAIR.
Institutional Revenue. By H. D. DICKINSON.
Food Prices of Exported Manufactures. By GILBERT SLATER.
Railway Amalgamations: Reorganization and Consolidation of Capital.
By WILLIAM ASHTON and ALEC BERRY.

RECENT PERIODICALS

INDIAN

THE CALCUTTA REVIEW

JUNE 1924

The Stinnes Complex in German Industry By BENOY KUMAR SIRCAR.

SEPTEMBER 1924

The Gold Exchange Standard during and after the War. By B. R. CHATTERJEE.

OCTOBER 1924

Bengal in Olden Times, 1707-1757. By J. C. SINHA.

THE MODERN REVIEW

SEPTEMBER 1924

Side Lights on the Economics of Reparations. By BINOY K. SIRKAR.
The Problem of Agricultural Labour in India. By RADHAKAMAL MUKERJEE

	31st March 1924	30th April 1924	31st May 1924

ABSTRACT OF THE ACCOUNTS OF THE DEPARTMENT OF ISSUE OF PAPER CURRENCY

Lakhs of Rupees

Total amount of notes in circulation	1,85,85	1,81,33	1,78,13(x)
RESERVE.			
Coin and Bullion (*In India*)			
Siver Coin	74,18	71,51	70,30
Gold coin and Bullion ..	22,32	22,32	22,32
Silver Bullion under Coinage ..	5,82	5,99	5,99
Securities (*purchase price*)			
Held in India	57,53	57,53	57,53
Held in England	14,00	14,00	14,00
Internal Bills of Exchange ..	12,00	10,00	8,00
Total ..	1,85,85	1,81,33	1,78,13

BALANCE OF THE GOLD STANDARD RESERVE IN INDIA AND IN ENGLAND ON THE LAST DAY OF EACH MONTH

Gold in India			
Cash at the Bank of England ..	941	2,830	3,693
British Securities (*value as of 31st March 1924*)	39,999,059	28,187,394	16,680,132
Securities since purchased ..	..	11,849,993	20,417,782
Total ..	40,000,000	40,040,217	40,101,607

BALANCE HELD IN CASH IN THE GOVERNMENT CIVIL TREASURIES AND AT CREDIT OF GOVERNMENT IN THE IMPERIAL BANK AND ITS BRANCHES—BANK RATES—EXCHANGE—SILVER, ETC.

Treasury Balance (*Thousands of rupees*)	30,95,47	22,98,09	23,46,90
Bank Rates (per cent)			
Imperial Bank of India ..	9	8	7
Bank of England	4	4	4
Exchange Rates (s.d.)			
On Demand	1 4 11/16	1 4 3/4	1 4 7/8
Telegraphic Transfer ..	1 4 21/32	1 4 23/32	1 4 27/32
3 Months'	1 4 29/32	1 4 15/16	1 5 1/16
6 Months'	1 5 5/32	1 5 3/16	1 5 5/16
Government Paper (3½ p. c.) ..	66 7/8	67 5/8	68 1/16
Bar Silver in London (pence) ..	33 5/16	32 15/16	35 1/8

(x) 22nd May 1924.

30th June 1924	31st July 1924	31st August 1924
ABSTRACT OF THE ACCOUNTS OF THE DEPARTMENT OF ISSUE OF PAPER CURRENCY. *Lakhs of Rupees*		
1,72,49	1,76,24	1,78,13
72,47	76,23	78,06
22,32	22,32	22,32
6,18	6,34	6,42
57,53	57,35	57,34
14,00	14,00	14,00
1,72,49	1,76,24	1,78,13
BALANCE OF THE GOLD STANDARD RESERVE IN INDIA AND IN ENGLAND ON THE LAST DAY OF EACH MONTH.		
3,190	2,628	4,710
16,479,501	16,479,501	16,479,501
23,654,881	23,683,222	23,975,579
40,137,572	40,165,451	40,459,790
BALANCE HELD IN CASH IN THE GOVERNMENT CIVIL TREASURIES AND AT CREDIT OF GOVERNMENT IN THE IMPERIAL BANK AND ITS BRANCHES—BANK RATES—EXCHANGE—SILVER, ETC.		
25,03,78	34,98,68	34,79,61
6	4	5
4	4	4
1 5 1/32	1 5 15/16	1 5 9/32
1 5	1 5 7/16	1 5 7/32
1 5 1/4	1 5 23/32	1 5 1/2
1 5 1/2	1 5 31/32	1 5 3/4
67 3/4	67 7/8	66 3/4
34 1/4	34 1/2	34 3/8

BOOKS RECEIVED

India's Demand For Transportation. By WILLIAM ERNEST WELD. New York: Columbia University. 1920. Pp. 127. Price: $ 1.25.

International Labor Legislation. By IWAO FREDERICK AYUSAWA. New York: Columbia University. 1920. Pp. 258. Price: $ 2.75.

Catastrophe and Social Change. By SAMUEL HENRY PRINCE. New York: Columbia University. 1920. Pp. 151. Price: $ 1.50.

Social Aspects of the Treatment of the Insane. By JACOB A. GOLDBERG. New York: Columbia University. 1921. Pp. 247. Price: $ 2.50.

The Economic History of China. By MABEL PING-HUA LEE. New York: Columbia University. 1921. Pp. 461. Price: $ 4.50.

The Evolution of People's Banks. By DONALD S. TUCKER. New York: Columbia University. 1922. Pp. 271. Price: $ 2.75.

The Relation of British Policy to the Declaration of the Monroe Doctrine.. By LEONARD AXEL LAWSON. New York: Columbia University. 1922. Pp. 153. Price: $ 1.50.

Labor and Empire. By TINGFU F. HSIANG. New York: Columbia University. 1923. Pp. 220. $ 2.25.

Two Portuguese Communities in New England. By DONALD R. TAFT. New York: Columbia University. 1923. Pp. 357. Price: $ 4.00.

The Pre-War Business Cycle 1907 to 1914. By WILLIAM CHARLES SCHLUTER. New York: Columbia University. 1923. Pp. 189. Price: $ 2.00.

Foreign Credit Facilities in the United Kingdom. By LELAND REX ROBINSON. New York: Columbia University. 1923. Pp. 229. Price: $ 2.50.

The United Mine Workers of America and the Non-Union Coal Fields. By A. F. HINRICHS. New York: Columbia University. 1923. Pp. 196. Price: $ 2.00.

Business Fluctuations and the American Labor Movement, 1915-1922. By V. W. LANFEAR. New York: Columbia University. 1924. Pp. 132.

Labor Disputes and the President of the United States. By EDWARD BERMAN. New York: Columbia University. 1924. Pp. 284.

The Working Forces in Japanese Politics 1867-1920. By UICHI IWASAKI. New York: Columbia University. 1921. Pp. 141. Price: $ 1.50.

State Taxation of Personal Incomes. By ALZADA COMSTOCK. New York: Columbia University. 1921. Pp. 246. Price: $ 2.50.

Japan's Financial Relations with the United States. By GYOJU ODATE. New York: Columbia University. 1922. Pp. 136. Price: $ 1.25.

Central and Local Finance in China. By CHUAN SHIH LI. New York: Columbia University. 1922. Pp. 187. Price: $ 2.00.

An Introduction to Economics. By HARLEY L. LUTZ and BENJAMIN F. STANTON. New York: Row, Peterson and Company. 1923. Pp. vi, 533.

Social Work in Hospitals. By IDA M. CANNON. New York: Russell Sage Foundation. 1923. Pp. xiii, 247. Price: $ 1.50.

America's Marriage Laws. By FRED S. HALL and ELIZABETH W. BROOKE. New York: Russell Sage Foundation. 1919. Pp. 132.

Education and Training for Social Work. By JAMES H. TUFTS. New York: Russell Sage Foundation. 1923. Pp. xii. 240. Price : $ 1.50.

The Burden of Unemployment. By PHILIP KLEIN. New York: Russell Sage Foundation. 1923. Pp. 260. Price: $ 2.00.

Social Diagnosis. By MARY E. RICHMOND. New York: Russell Sage Foundation. 1917. Pp. 511. Price: $ 2.00.

The Settlement Horizon. By ROBERT A. WOODS and ALBERT J. KENNEDY. New York: Russell Sage Foundation. 1922. Pp. 499. Price: $ 3.00.

What Social Workers Should Know about their Own Communities. By MARGARET F. BYINGTON. New York: Russell Sage Foundation. 1924. Pp. 66. Price: $0.25.

Recent Progress in Child Welfare Legislation. New York: Russell Sage Foundation 1924. Pp. 32. Price: $0.15.

Publicity Methods Reading List. By EVART G. RONTZAHN and MARY SWAIN RONTZAHN. New York: Russell Sage Foundation. 1924. Pp. 48. Price: $0.30.

The Economic Poistion of Married Women. By Mrs. H. A. L. FISHER. Oxford University Press. 1924. Pp. 30. Price: 1s 6d.

The Making of Index Numbers. By IRVING FISHER. New York: Houghton Mifflin Company. 1923. Pp. xxxiii, 526. Price: $7.50.

Costs and Profits—Their Relation to the Business Cycle. By HUDSON BRIDGE HASTINGS. New York: Houghton Mifflin Company. 1923. Pp. x, 168. Price: $ 2.50.

Money. By WILLIAM TRUFANT FOSTER and WADDILL CATCHINGS. New York: Houghton Mifflin Company. 1924. Pp. viii, 409. Price: $ 3.50.

Cycles of Unemployment in the United States. By WILLIAM A. BERRIDGE. New York: Houghton Mifflin Company. 1923. Pp. xiii, 88. Price: $ 1.25.

Land-Value Policy. By JAMES DUNDAS WHITE. London: The United Committee for the Taxation of Land Values. 1924. Pp. xx, 205. Price: 2s.

Every Man's Wages. By GEORGE BURGESS. London: The United Committee for the Taxation of land Values. Pp. 47. Price: 2s.

14 one penny pamphlets. London: The United Committee for the Taxation of Land Values.

The Miners' Unions of Northumberland and Durham. By E. WELBOURNE, Cambridge: Uuiversity Press. 1923. Pp. 321. Price: 10s. 6d.

Foundations of Agricultural Economics. By J. A. VENN. Cambridge : University Press. 1923. Pp. 397. Price : 16s.

Report on Cooporative Societies in Mysore : 1922-23. Bangalore : Government Press. 1924. Pp. 39.

Bihar and Orissa in 1923. Patna : Superintendent Government Printing, Bihar and Orissa. Pp. 140. Price : Rs. 1-8 0.

How Much Shall I Give ? By LILIAN BRANDT. New York : The Frontier Press. 1921. Pp. 153. Price : $2.00.

American Social Work in the 20th Century. By EDWARD T. DEVINE and LILIAN BRANDT. New York : The Frontier Press. 1921. Pp. 62. Price : $0.50.

Is Unemployment Inevitable ? London : The Macmillan Co. 1924. Pp. 388. Price : 8s. 6d.

Revenue Act of 1924. New York : National Bank of Commerce. Pp. 236.

Protection for Indan Steel. By E. H. SOLOMON. Calcutta : University of Calcutta. Pp. 103. Price : Rs. 8-6-0.

Economic History of England. By M. BRIGGS. London: University Tutorial Press. Pp. 511. Price: 8s. 6d.

Textbook of Economics. By M. BRIGGS. London: University Tutorial Press. Pp. 527. Price: 6s.

Social History of England. By BRADSHAW. London: University Tutorial Press. Pp. 404. Price: 5s. 6d.

Banking and Currency. By WESTON. London: University Tutorial Press. Pp. 330.

Practical Lessons in Bookkeeping. By JACKSONOW. London: University Tutorial Press. Pp. 402. Price: 5s.

Financial Incentives for Employees and Executives. Edited By DANIEL BLOOMFIED. New York: The H. W. Wilson Company. 1923. 2 vols Pp. 407, 325.

Problems in Personnel Management. Edited by DANIEL BLOOMFIELD. New York: The H. W. Wilson Company. 1923. Pp. 557. Price: $3.50.

The Modern Executive. Edited by DANIEL BLOOMFIELD. New York: The H. W. Wilson Company. 1924. Pp. 266. Price: $ 2.25.

Preliminary Abstract of Statistics of Indian Railways for 1923-24. Simla: Government of India Press. 1924. Pp. 33. Price: Rs. 1-4-0.

1923 International Conference on the Taxation of Land Values. London: The United Committee for the Taxation of Land Values. 1923. Pp. 68. Price: 2s.

Business Organisation. By D. PANT. Lahore: Commercial Book Company. 1924. Pp. 114.

The Problem of Business Forecasting. Edited by WARREN M. PERSONS, WILLIAM TRUFANT FOSTER and ALBERT J. HETTINGER, Jr. Boston and New York: Houghton Mifflin Company. 1924. Pp. 317. Price: $ 4.00.

Russian Debts and Russian Reconstruction. By. LEO PASVOLSKY and HAROLD G. MOULTON. New York: McGraw-Hill Book Company. 1924. Pp. 247. Price: $ 2.50.

American Agriculture and the European Market. By EDWIN G. NOURSE. New York: McGraw-Hill Book Company. 1924. Pp. 333. Price:

INDIAN
JOURNAL OF ECONOMICS

Vol. V—Part 3

INDIAN EXPORTS OF COTTON GOODS IN THE SEVENTEENTH CENTURY.

W. H. MORELAND.

1. *Introductory.*

In this paper I attempt to give a general description of the export trade in cotton goods from India in the seventeenth century, together with a few data which may help students to an appreciation of its magnitude At this period there were three dominant lines of commerce in Asiatic waters, spices and drugs, cotton goods, and the precious metals. Spices and drugs had to be distributed over Asia, Europe and part of Africa: in order to move them, it was necessary to lay down cotton goods in the producing markets, because producers would take little else; and, in order to obtain sufficient cotton goods, it was necessary to lay down gold or silver in India, because the effective demand for other imports was altogether inadequate. Thus, at the opening of the century, the cloth trade was primarily of Asiatic interest, though the Portuguese had developed an additional outlet to West Africa and Brazil; but as time went on European markets were opened up, first for house linen, and then for dress and decorative fabrics, until the trade came to interest the West almost as much as it interested the East. No one can hope to understand the extensive literature dealing with the commerce of the century until he has obtained a general idea of the nature of this trade, and my present object is to furnish a description which may serve as an introduction to the contemporary documents.

The difficulties which confront the student of this trade are twofold, the imperfection of the records, which is beyond remedy, and the complexity of the nomenclature, which can, as I hope to show, be made intelligible. It has been usual in the past to attack the trade-names from the linguistic side: some one has guessed a derivation, and then deduced the nature of the fabric from his guess. The danger of this course will be apparent when it is realised that a particular name may be drawn from any Indian language, from Malay, Arabic, or Persian, from Dutch, English, or Portuguese; but its unfruitfulness is sufficiently established by the results scattered through the literature of the subject. One example of these must suffice, and I take it from that invaluable work, *Hobson-Jobson*, (p. 708, revised edition).

"PERCAULAS. H *parkala*, 'a spark, a piece of glass'. These were probably some kind of spangled robe, set with pieces of glass."

Every student of the commercial documents knows, however, that percaulas, or percalles, was the trade name for one of the high-grade calicoes of the Coromandel Coast, which for a time had a large sale in Europe, especially in France[1]; the guess at the derivation may be correct, but the inference drawn from it is certainly misleading. The right way to interpret these trade-names is to work through extant commercial documents, and piece together the facts they disclose until a more or less precise idea of their meaning can be formed; when that has been done, the question of derivation may be left to linguistic scholars, if it has not answered itself. This line of attack involves the abandonment of any systematic attempt at scientific transliteration, and in this paper I use one or other of the forms in which a name was actually written, transliterating on modren lines only when there is no reasonable doubt about the identity of the word (*e. g.* baftas, or dariyabads). The reader must be prepared for numerous variations in spelling: if, for instance, I write about muttfoons, he must infer that I am writing about muddphoons, or madafunums, or half a dozen other forms which he may find in the literature; I no not know what the word is, or to what language it belongs, and therefore I can say nothing about the correct spelling, but I know the sort of fabric it meant to the buyers and brokers who handled it in large quantities, and for the present purpose that is the thing which matters most.

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[1] I must apologise once for all for not giving references to the authorities for these, and other, statements of fact. The matter is simply one of bulk; certainty depends on the cumulative force of a large number of items of information, and one must give all the references or none. I have about 50 references to show the nature of percalles alone, and, if I were to work on this scale, I should almost want a special number of the *Journal* merely to record the literature,

So interpreted, the trade-names are found usually to denote fabrics of definite shapes and dimensions, of definite texture, definite appearance in regard to pattern or colour, and many of them designed for particular foreign markets. I have worked over about 200 of these names, and doubtless there were others which I have not yet come across. The first step to understanding them must obviously be a scheme of classification, so that they can be described in convenient groups. The classification I use is based on that which underlies the Dutch and English records, and is practical rather than scientific. A broad distinction is first drawn between plain and fancy goods. Plain goods are then divided into calico and muslin, the latter term being substituted for the older calico-lawn; each of these heads is further subdivided, mainly in accordance with the source of supply. Fancy goods also must be broken up into several sub-divisions, which will be explained in section 4. There are a few names on the border line between two classes or subdivisions, but none of them are of great importance, and while it is easy to raise objections to the framework, its convenience is borne out by experience.

2. *Calico.*

Calico, that is to say, a plain, substantial, cotton cloth, obtainable either unbleached, bleached, or dyed in the piece, was made in nearly all parts of India, and primarily for the wear of the people in the locality of production. A few localities, for the most part near the coast, had specialised their production to meet the needs of foreign markets; and Dutch or English buyers, as they penetrated the country, from time to time developed a new export business in places which had previously produced mainly for Indian consumption, that is to say, foreign buyers found the produce of some localities to be well-suited to their needs. This paper is not concerned with Indian consumption; foreign buyers naturally recorded little or nothing about it, and the statements in Indian records, such as the *Ain-i Akbari*, are usually too vague to be of much value, even for descriptive purposes.

Kinds of calico are distinguished in part by the usual size of the piece. Individual pieces differed, but for each description the market recognised a standard of size, the deviations from which were not as a rule more than about a foot or two in length, and two or three inches in width. Most of the dimensions I use are taken from Dutch invoices of large consignments, which give much detail in a bewildering variety of units; to facilitate comparison, I reduce them to the number of square yards (*s.y.*) per piece. This number is not absolutely precise, because of the individual differences metioned above: it is the average of consignments, and probably gives very nearly the actual average of the pieces they contained, but a little latitude must be allowed.

The other most important distinctions, fineness of yarn, and number of threads to the inch, cannot be stated directly, because the facts were not recorded. Taken together, however, they are indicated by the price paid for large consignments, when worked out for a unit of 100 square yards. Nearly all the prices I use are given in guilders or florins (*f*) into which the Dutch had converted them from the local currencies; the guilder was worth approximately *1s. 8d.* at the time these prices were recorded.[1] As regards finishing processes, comparative figures show that the cost of bleaching was under 1*f.* per 100 *s.y.*. and that of dyeing in the piece from 4 to 5*f*; no other special processes are recorded, so far as I know, but the possibilityy of their employment must be borne in mind.

Stout calicoes. Under this head I bring together the calicoes known to have been used largely (a) for sail-making, (b) for packing other piece-goods. Collectively they did not form a very important part of the export trade, and it is convenient to get them out of the way. The common names are: dungarees, used on the Coromandel and Malabar Coasts; Gujarat dutties; seryas (Gujarat and Sind); gerras (Bengal); sail-duck (Bengal). I take gerras to be what is now called *garha* in the North, and *khadi* in the West. The sail-duck was carried by the Dutch to their dockyard at Batavia, and may have been made to their special order. If, as it seems reasonable to infer, dutties were *dhotis*, the clothing worn by the masses in Gujarat must have been very coarse; we find dutties used for making corn sacks as well as for sails and for packing, and the Manchester duttie of to-day would make an indifferent sack, or sail. Apart from these goods, the calicoes which counted for most in the export trade can be described as Coast goods, Gujarats, Northerns, and Bengals.

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[1] The Dutch kept their accounts in guilders, converting Indian currencies at conventional rates. Up to 1680, the guilder was 5/6 rupee in India; apparently this was found to be inaccurate, for shortly afterwards the rate was altered to 2/3 rupee.

Coast goods. Exporters recognised six definite grades of calico obtained from the East Coast between Masulipatam and Negapatam; a few data regarding them are tabulated below.

	Length	*Width*	*Size of Piece*	*Dutch Price per 100 sy.*	*English offer*
Trade Name.	*Yds.*	*Inches.*	*sy.*	*f.*	*f.*
Longcloth (Guinea cloth).	37·5	38-40	40	18·0	16·2
Salempores.	15·5	38-40	17·2	19·5	18·0
Fine Salempores.	do.	do.	do.	43·0	32·4
Moorees.	9·0	45	11·2	43·5	32·4
Fine Moorees.	do.	do.	do.	..	51·0
Percalles.	8 0	36	8·0	..	49 0

In regard to prices, the most important thing for the present purpose is that they should be comparable, and the Dutch prices I give relate in all cases to the year 1680, which I choose merely because I have obtained an exceptionally good selection of invoices for the cloth bought in that year, and shipped in the spring of 1681. The English prices given for comparison under this group relate to 20 years earlier, and have been converted into guilders for ease in comparison It will be seen at once that a sharp line must be drawn between longcloth and salempores on the one hand, and the more expensive goods on the other. The great bulk of the Coast trade was in the cheaper classes; one meets longcloth and salempores in most markets, and often in large consignments, but moorees and percalles are found mainly as a retail trade until the European market for them developed.

Judging from price records, longcloth was more nearly standardised in quality than any other Indian calico, and is thus the most convenient standard for comparison; it must be described therefore in some little detail. The earlier trade name was Guinea cloth, which we find in the English records as being sold eastward from Achin before 1620, but the chief markets at that time were Guinea, where it was given *for* slaves, and Brazil, where it was given *to* slaves brought from Guinea by the Portuguese. The Dutch made a determined and successful attempt to capture the trade of these regions, and for this purpose we find them shipping large quantities of Guinea cloth to Holland before the European market for calico had developed. In their business the name 'Guinea cloth' was adopted, and it was adhered to when the cloth had become popular in Europe The English on the other hand seem to have dropped the name when they lost the markets East of Java soon after 1620; they were not at first interested in the Guinea trade, and for nearly 20 years they did not handle this commodity, but when they began to send it to Europe, they invoiced it as long cloth (two words), and later ran the two words into one. The significance of the name is obvious from the length of the pieces, more than double that of any other calico made largely on the Coast. The cloth was thus of low grade, suitable for slave-wear; it was stout, as details of packing show, and thus met the initial English demand for durable house-linen, cheap enough to undersell French and Scotch linens in Western Europe.

Ordinary salempores were about the same price as longcloth, but with a wider range; I suspect they were not quite so stout, but the evidence is insufficient for a definite conclusion on this point. Fine salempores, on the other hand, were a much higher grade, and it is safe to infer that they were made of finer yarn with more threads to the inch Judged by the price, they must be ranked with moorees, while fine moorees and percalles stand together as still finer.

A small export trade was done in Southern goods, the produce of the country from Negapatam to Cape Comorin, but its volume would not justify detailed description.

Gujarats. Gujarat calicoes were not graded in the convenient fashion found on the East Coast. The general name bafta was applied to a large range of goods, all of the same general style, but varying widely in price and fineness. The length ranged about 15 yards; the usual width was 25″ or less, which was too little for the European demand, but 'broad baftas' of 36″ or more were also common. Late in the century we find a large trade in 'half-baftas' (about 8 yards long), but apparently these were specially made for Europe. 'Coast-baftas' also become prominent: they were imitations of Gujarat goods, made on the Coromandel Coast.

A fine, white bafta was a suitable present for the king of an Eastern island, and the best of the Gujarat goods must have been admirable cloth, but these higher qualities did not enter largely into the export trade. Merchants in a large way of business would carry a few of them for presents to the authorities in the markets eastward from Achin, but the markets themselves were not able, or willing, to pay for quality: in them a bafta was just a bafta, and the cheaper it was, the more likely to sell. The Dutch prices in 1680 ranged from 17 to 27*f.* for dyed baftas, or say 21 *f* and under for undyed cloth: the exports thus rank with longcloth, though the Gujarat cloth was not quite so stout. Forty years earlier, the prices paid by English buyers were on just about the same level. Gujarat production was at its best in 1630, when it had just supplemented its large Asiatic market by that of London. The famine in that year disorganised the industry, and the bulk of the European demand was eventually met from the East Coast, but Gujarat continued to distribute large quantities of calico throughout the Asiatic seas.

With Gujarats may be classed the baftas and jhoonees made in Lower Sind. They were of about the same quality and price as the commercial grades of Gujarat calico, with which they were in competition, but one hears practically nothing of really high grades in this region.

Northerns. Calicoes made in the regions now known as the Punjab and the United Provinces did not enter largely into the Asiatic export trade: their importance for it arises from the fact that some of them were, to use the contemporary phrase, ‘ transformed’, that is to say, made up into specific garments, in Gujarat, and scarcely any except semianos (the produce of Samana in Patiala) were to be found in the coastal wholesale markets in their original state. For a time, however, they became important in the European trade. When the supply of Gujarats failed after the famine of 1630, buyers looked for suitable substitutes in the North, and Oudh goods sold well in London and Amsterdam; but the demand fell off when, at last, business in Madras had been placed on a proper footing, and the Coromandel Coast became the chief source of supply for Europe. The Dutch were not handling Northern goods in 1680, and consequently I have no prices for them in that year; but there is no

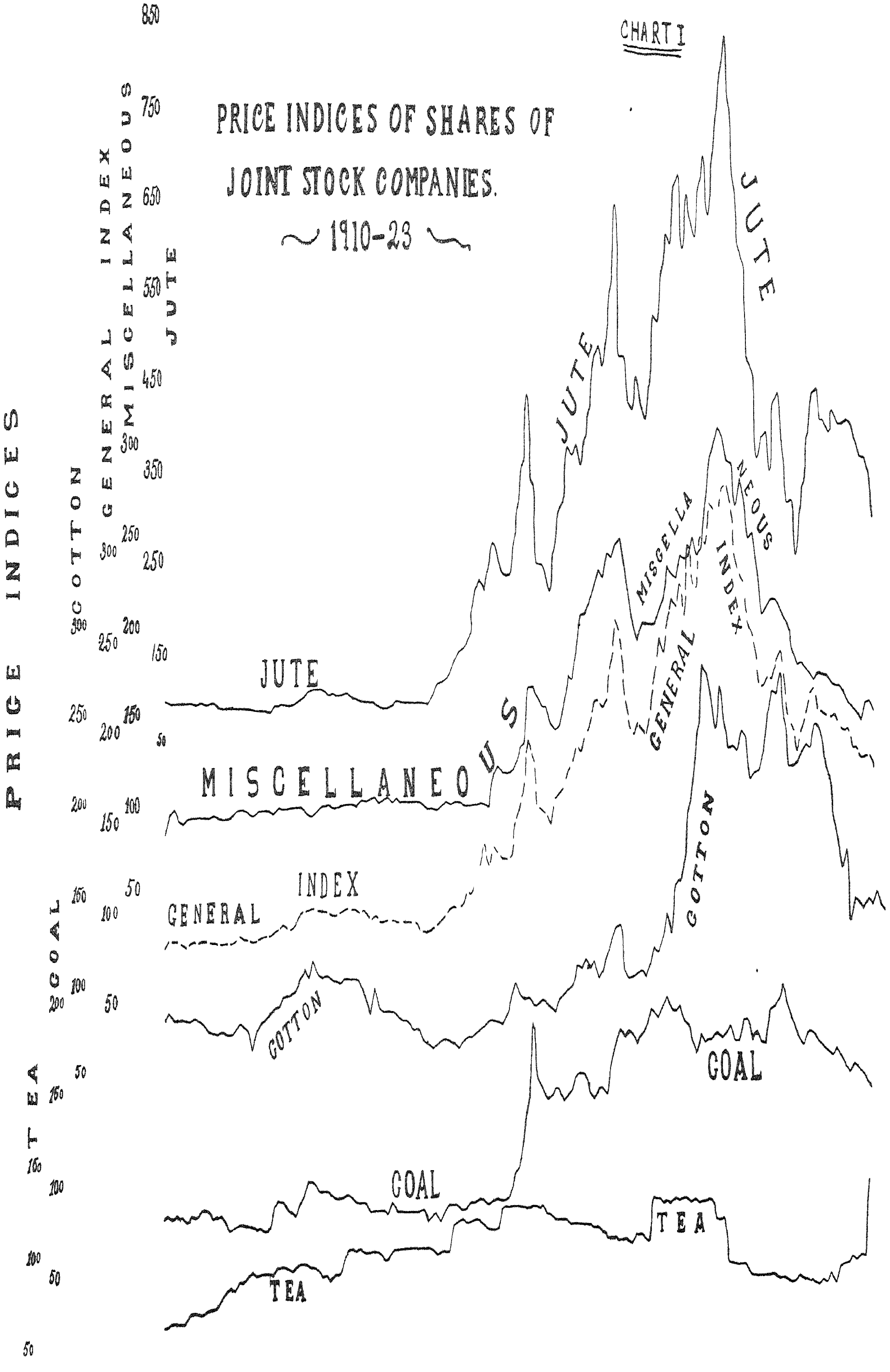


CHART I

PRICE INDICES OF SHARES OF JOINT STOCK COMPANIES.

~ 1910-23 ~

A. Prices of shares of joint stock companies

B. General securities (Labour Gazette)

C. Fixed-Interest Securities

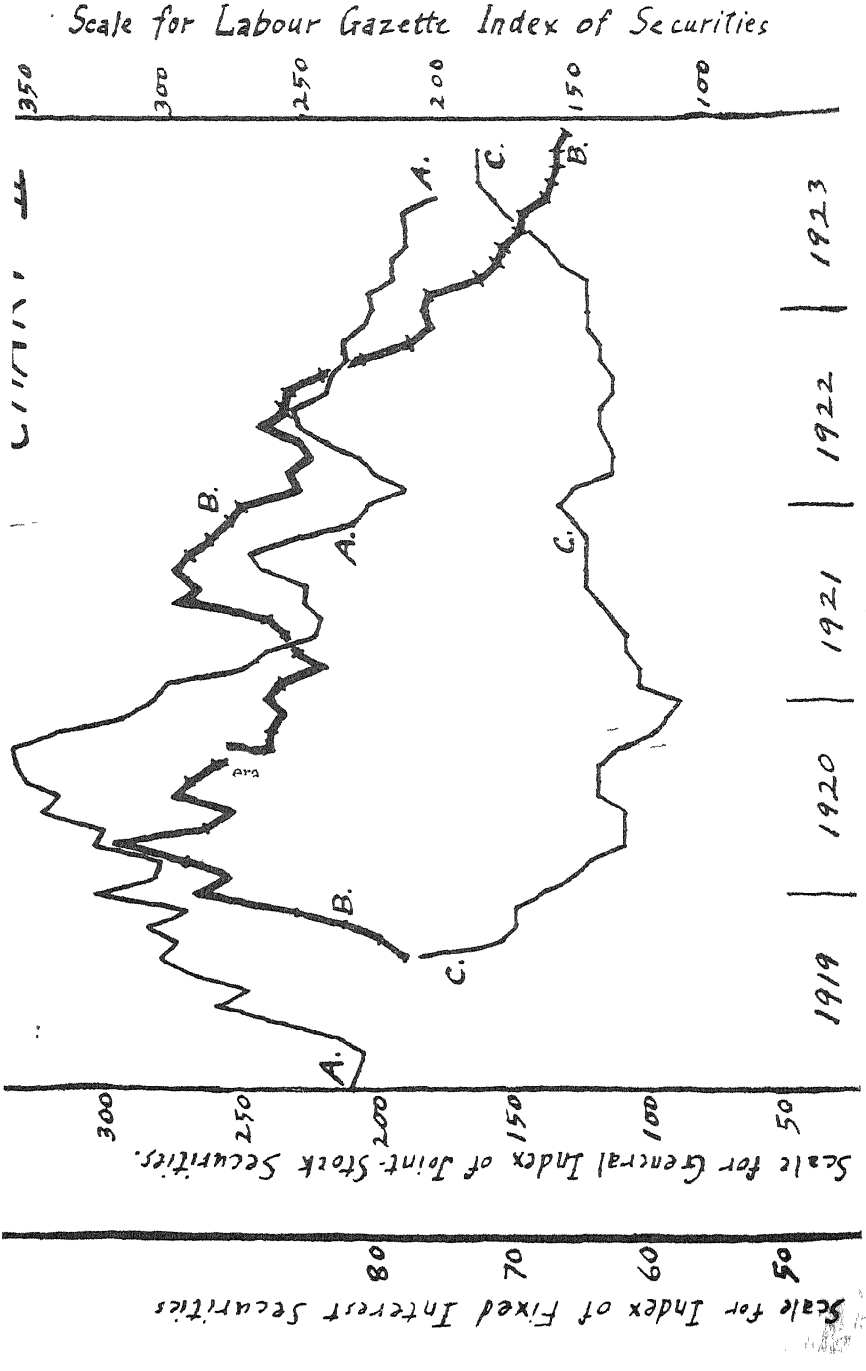
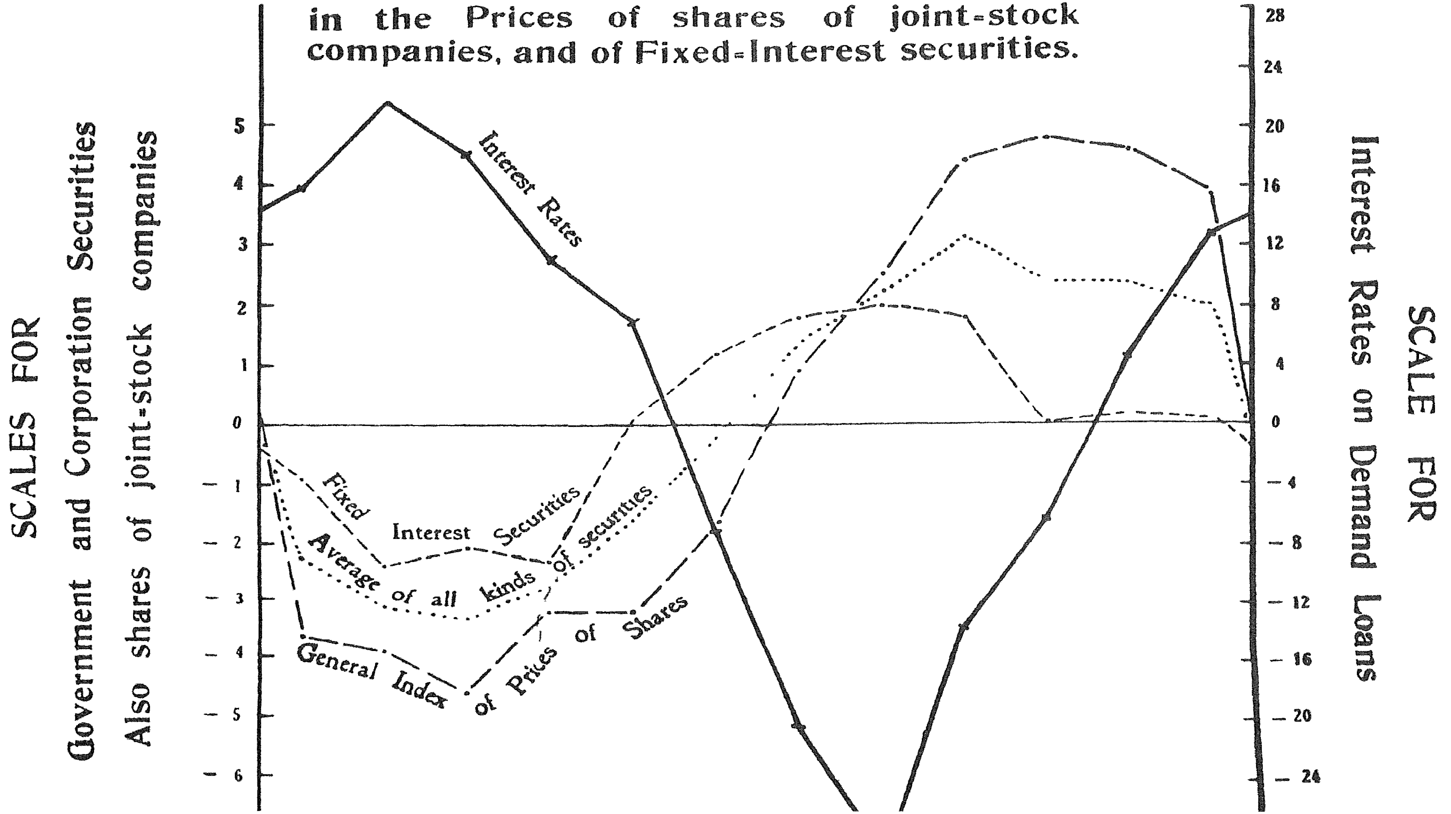


CHART III

Seasonal Fluctuations

in the rate of Interest on Demand Loans, in the Prices of shares of joint-stock companies, and of Fixed-Interest securities.



doubt that were of the same grade as ordinary Gujarats, though heavy sizing gave them a deceptive appearance of stoutness.

The calico used for making-up will be mentioned later, and the other goods were not sufficiently important in the export trade to call for detailed description, but, in a paper intended to be published in Allahabad, it is permissible to say a few words about the commonest trade-names in Oudh. The widest name is choutar (occasionally confused with *chadar*): I cannot explain it, but it was used in the markets to describe northern calicoes in general. Of the specific names, dariyabads and khairabads explain themselves to people familiar with the two little towns, the first in Bara Banki, the second in Sitapur Gelalepores may safely be referred to Jalalpur in Fyzabad. Echbarrys have been referred to the Emperor Akbar: we know only that they were made near Jalalpur, and possibly the name points to the town of Akbarpur. Mercoolees were made chiefly in Western Oudh, apparently in Hardoi and the North of Unao; I have no idea what the name means and should welcome any information regarding it.

These Oudh goods differed somewhat in dimensions, but all of them could serve as substitutes for the commercial grades of baftas, and they may therefore be regarded as of similar quality. They were cheaper than baftas, but the extra cost of carriage to the coast obliterated this advantage, and in Gujarat the difference in price, one way or the other, was very small.

Among other Northern goods may be mentioned the ambertees of the Patna country. They were good cloth, but mostly too narrow for European markets. The superior grades were called Zefferconnyes and Jehangeres; presumably the former refers to a patron called Jafar Khan, and the latter either to the Emperor or to another patron.

Bengals. During most of the century the export trade of Bengal suffered from a variety of causes—maladministration, pirates, and the 'war' with Denmark—and the names of Bengal fabrics are very rarely met with in Asiatic markets. After about 1660 the Dutch and English shipped some of them to Europe in considerable quantities, and the following details indicate the nature of the goods they handled.

Trade name.	*Length Yds.*	*Width Inches*	*Size of Piece sy.*	*Price per 100 sy. f*
Sologessees	12-0	36″	12-0	(*a*) 30-37 (*b*) 56-58
Plain ginghams	10-0	36″	10-0	38
Hummums	12-0	54″	18-0	50-75
Sanoes	10-0	36″	10-0	(*a*) 70 (*b*) 93-99.

It will be seen at once that these goods were of relatively superior grades; even the plain ginghams[3] and the cheaper sologessees stood in the Dutch books at much higher prices than longcloth, while hummums and sanoes were more costly than any calico handled on the Coast. That coarser goods were available in Bengal is proved by the small trade which is found in gerras, (mentioned above), but the Dutch satisfied their wants for cheap calico elsewhere, and bought only specialities in Bengal. Most of the goods named would have been too dear for the markets East of Java, except for retail sales; one hears of them up the country as far as Agra, and they may have been carried to Northern Persia by the land route, though my records do not mention the fact.

3. *Muslin.*

The muslins handled in foreign trade came either from the Deccan or from Bengal The term denotes cloth more loosely woven than calico, and grade for grade, of finer yarn; like calico, it could be bought unbleached, bleached, or dyed. The range of quality was very wide, but the bulk of the trade was done in cheap goods, and I have traced no considerable export of the finest Dacca muslins by sea until the time when they became fashionable in Europe. The usual contemporary name for muslin was calico-lawn; while the English marchants frequently used 'shashes' as a generic term for turban-cloth.

Deccan Muslin. Muslin was made over an extensive area in the Deccan, in parts of which the superior cotton known as *bani* (Gossypium Indicum) was largely grown, and presumably the two facts are connected. It was expored from Surat as well as from Masulipatam, and we find different trade names in the two seaports, which may possibly be synonyms, or more probably denote different local makes. It was also carried overland by way of Lahore to Northern Persia; but the main supply for the countries west of India went by sea from Surat to Gombroon, Basra, and Mocha. Commercial details regarding this trade are scanty, but the pieces ranged about 12 yards long by 24 to 36 inches wide. The commonest trade name on the western side of India was serrebaff; the few quotations I have found for it work out to about 25 *f* per 100 *s. y* at Surat, slightly dearer than common calico, but much cheaper than such goods as percalles or sanoes; there was however a wide range of quality, as was the case with all the muslins of which we hear.

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[3] Ginghams were often woven with a pattern, but the goods referred to in the text were specially described as 'plain' in the invoices. 'Sologessees' may safely be read as *shologazis*, or '16-yarders': this points to a Bengal *gaz* of 27 inches, which is the length given by Bowrey, *Countries round the Bay Bengal*, p. 217.

On the East Coast the regular trade-name for all grades of Deccan Muslin was betilles, apparently the Portuguese word *beatilha* (veiling). These goods went direct to Gombroon by sea, but they were also distributed very widely to Java and beyond, while towards the end of the century they were gaining a large market in Europe. The following details regarding them are taken from consignments recorded in Dutch invoices of 1681.

Description	*Length Yds.*	*Width Inches*	*Size of piece s. y.*	*Price per 100 s. y. f*
Bleached	20	40	22-2	15-8
Uubleached	14	31-5	11-4	25-4
,,	15-2	38-2	16-2	16-4
,,	16-0	40	17-8	26-7
,,	14-0	31-5	11-4	21-9
,,	15-5	40	17-2	19-8
Heavy, silver ends	19-5	36	19-5	17-5
Ternate, gold stripes	15-5	40	17-2	34-4
Chiavonys, bleached.	8-0	32	7-3	15-7

It will be seen that the pieces varied considerably in point of size, and that while the range of prices was wide, the goods stand as a whole on the same level as cheap calico; they should not be regarded as luxuries, but as thin cloth for wear in warm climates. The name 'Ternate' presumably endicates a size and quality in demand in the

Molucca Island, and the exceptional price quoted above must be attributted largely to the gold stripes: Ternates were made also with silver stripes, and these could be had for as little as 17 *f*. I am doubtful if chiavonys should be classed as betilles, but in any case they were muslins from this part of the country. The commonest epithet applied to betilles is 'Oringall' in English, and 'Orinael' in Dutch; these may safely be referred to the district of Warangal, now part of Hyderabad, which lies in the commercial hinterland of Masulipatam.

Bengal Muslin. The trade-names met with are fotas, mulmuls, and cassas. Fotas, presumable turban-cloth, cost somewhere about the same as betilles, and apparently represent the lowest grades. I have not found any clear indication of the distinction between cassas and mulmuls, but, judged by price, both were definitely superior to betilles. The range of quality was wide, but the costlies Dutch consignment I have found was a small lot at 63-5 *f* per 100 *s. y.*, or much less than was being paid for the finest calico. Details regarding fotas are obscure:[1] those available for consignments of the other descriptions are shown below, with the localities of origin.

Description	*Locality*	*Length Yards*	*Width Inches*	*Size of Piece s. y.*	*Price per 100 s. y. f.*	
Mulmuls.	Malda.	20	38-2	21-2	44-1	
do.	do.	20	40-4	22-5	37-1	
do.	do.	20	45	25-0	31-4	
do.	Dacca	20	45	25 0	(60-3 (15 6	
Cassas	Malda.	20	45	25-0	(57-9) (32-4)	An assorted consignment; average about 45 *f*.
do.	do.	20	45	25-0	52-8	
do.	Dacca.	20	45	25-0	57-5	

As with calico, so with muslin, we meet Bengal goods so rarely in the Asiatic trade that I cannot say whether these figures fairly represent the staple production: if they do, then cassas and mulmuls were too dear for the markets eastward from Achin. They were on sale all over the North of India, and were exported from Lahore to Northern Persia, while they were carried by sea from Masulipatam to Combroon, but I have no record of large consignments on this route.

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[1] The invoice details give a price of about 5 *f* or 6 *f* only for fotas, but there is some apparent confusion in the entries between pieces and lots of four pieces. I think the correct price is 20-25 *f*, or four times the calculated figures: even so the Bengal turban cloth was little dearer than betilles

4. Fancy Goods.

Under this general head come all the goods, other than plain piece-goods (muslin and calico), which were distributed through a large number of markets, each with its own distinctive tastes, and all of them (with the exception of Japan) disinclined for novelties. The degree of specialisation varied widely; some of the names indicate a very small amount of making-up, while others approximate to modern ideas of apparel and hosiery; I have found nothing which can be called a system of classification, and, merely as a matter of convenience, I have grouped the names which I understand as 1) transformed, 2) patterned, 3) printed, 4) specific articles.

Transformed goods. These consisted of ordinary calico, cut to size and dyed; there may have been other features, such as hems or fringes, but I have no record of them, and the prices range too near to those of dyed calico to give room for much additional work or material. The commonest description under this head is cannikens, which sold almost everywhere from Mozambique to Macassar. They were out from narrow baftas, either 3 or 4 to the piece, and dyed blue or black; they formed quite a large proportion of the export from Gujarat. Ardeas were made up in Gujarat and elsewhere from guzzees (a long, stout, calico made in Northern India) and dyed red;[1] we meet them in Java, Persia, Basra and Mocha. Tricandees were made from Gujarat dutties, apparently three to the piece, dyed, usually red, and sold mainly in Java. Other trade names are burtungeers (pieces of red jhoorees from Sind), sealas[2] (pieces of Northern Echbarrys dyed red), chekars and gageas (both red, of doubtful material). 'Transforming' seems to have been a speciality of Gujarat, and I have not read of it being practised on the East Coast or in Bengal.

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[1] *Gazi* is still quite familiar in the North as a name for hand-woven calico.

[2] There is an exceedingly puzzling assortment of names of this general form. They can be arranged in a series leading from *salu* to *sela*; but we know that *sela* meant a calico woven in coloured checks, while *salu* meant cloth dyed red in the piece, and *sallows* were, sometimes at least, undyed muslins, so that the name must be interpreted by the context in each case.

I class byramees under this head, though with some diffidence. Some references suggest that this cloth was specially woven, while others, show that it was made up in Gujarat from broad baftas, mercoolees, and echbairys. The range of quality was very wide, the colour varied, and apparently the name denotes pieces of about 6½ yds. 36 inches, perhaps with some distinctive finish, of which however I have found no record; whatever it was, it sold in most of the Asiatic markets.

Patterned goods. This term covers patterns produced in weaving, whether plain or coloured, but excludes patterns produced on the finished cloth by printing or otherwise. In some cases the records do not show whether the pattern was plain or coloured. This is often the case in regard to a group of fabrics (allejais, tapseels, doriyas), the names of which apply to silk goods as well as cotton, and apparently also to union cloths, in which silk stripes wère intermingled; these goods are mentioned pretty frequently as exports, but so far as I have seen in quite small lots. Apart from these goods, plain patterns were known in the markets, some of them flat, which English buyers compared to diaper, others raised, which they classed as dimity, but I have found no record of any considerable trade in them. The striped ginghams of Bengal were however fairly widely distributed.

The bulk of the trade in coloured patterns was of low grade, as can be inferred from the generic names-Guinea-stuffs, slave-clouts, negro-clothes; these were woven with coloured yarn, in stripes or checks, usually blue and white, and in texture were similar to the lower-grade calicoes. They were made of various descriptions, (e g., hassanees, carolee, chuckarees, populees), and were woven mainly in Gujarat. Necanees were perhaps the most widely distributed of this group of fabrics; they were usually striped, but late in the century the name becomes ambiguous, because the Dutch were experimenting, and we hear of "new-style" necanees being sent to Amsterdam, but the page of the invoice which described them is unfortunately illegible. Selas and muttfoons come in the same grade Apart from extensive sales in various Asiatic markets, they were the regulation wear for the Dutch Company's slaves in Batavia, and periodical issues are recorded, one cloth of each kind to each adult, and one sela to each child. They were short pieces of rather stout calico, containing 7 to 9 square yards: the check patterns were usually blue and white, but sometime red and blue. Prices for the ordinary grades ranged about 24 *f* per 100 s.y., which, allowing for the coloured yarn, brings them about on a level with longcloth, but higher qualities, up to 40 *f*, were occasionally shipped to Europe.

Printed goods fall into two main divisions, pintados and chintz. The former word (Portuguese *pintado*, painted) properly denotes the brush-work patterns of the East Coast, while the latter is the Hindi *chit*, hand-printed from wooden blocks; but these classes were to some extent interchangeable in commerce, and European buyers interchanged the names also. Printed goods were the customary wear in a large part of southern Asia, and many of the specific articles noted below were made of printed or painted cloth; exports from the Coromandel Coast were of great importance, especially to some of the Spice Islands, where the people would sell their produce for nothing else.

The cloth used was mainly of the lower grades. One hears occasionally of painted percalles, but as a rule longe-cloth, salempores, and betilles were used on the East Coast, and ordinary calico elsewhere. I have not found any satisfactory figures for the cost of printing or painting, or for the finished cloth, as sold in Asia. Late in the century these fabrics came into fashion in Western Europe for decorateing rooms, as a substitute for tapestry; a Dutch invoice of 1681 describes a consignment of 'Surat wide chits for room-hangings, with various flower-work and colours, with pillars and feet'—that is, I suppose, borders for the different walls; the cost works out at 33·2 *f* per 100 *s.y.*, so that the cloth cannot have been expensive. Another consignment from Patna was invoiced in four grades, costing respectively 28, 30, 37 and 45 *f*.

Spetific articles. Here we have trade-terminology at its worst, so far as English or Indian readers are concerned, because many of the names come from the foreign consuming markets, and there is a jumble of different languages. In some cases, however, the names are real descriptions, and, when they are translated, the nature of the goods often becomes fairly clear: 'Ickatt pingons', for instance, is an expression to frighten most readers, but it is merely

Malay for a girdle, and need cause no more alarm than 'chawders pintados', which obviously denotes painted *chadars* or wraps. The position in the seventeenth century was that India was supplying clothes to a considerable number of markets, each with its distinctive taste: Java fashions would not sell in Siam, nor would Sumatra fashions sell in Java; even the far-off island of Timor had its own type of girdle, for which it would not willingly take a substitute; and merchants in the Indian trade had to make themselves familiar with the needs of each market where they wished to deal. The usual word for fashion is the Malay-Sanskrit *chara*; and we find an English factor writing that he could not sell his stock at Bantam "because it is chera Mallaia [Malay style], and the people here will wear no other fashion but their own, which is chera Java." Unfortunately none of the European merchants trading in these parts seems to have thought it worth while to record a complete explanation of the names used in even a single market, and the facts have to be gathered from incidental remarks. Even so I have many more facts than can be offered here: the most I can do is to explain a few of the commonest terms[1],

Anacke probably denotes children's size. 'Tappe anacke' would be children's tappes.

Dragam or *dragon* appears to refer primarily to colour, but, as often happens, the precise colour is indeterminate. Merchants used it as a substantive, as we might say 'reds' or 'browns'.

Gobar indicates a sheet.

Sarass is a wide term denoting painted cloth, usually in the from of loincloths.

Tappe is a woman's lower garment.

These terms are frequently combined. Tappe sarass would be a skirt of sarass cloth; sarass gobar, probably a sheet of the same; tappe chintz, a skirt of chintz; dragam malaya, a 'dragon' in the Malay fashion, and so on. They are also qualified by adjectives drawn from various languages; tappes for instance might be grandes, (Portuguese, large), or quechiils (Malay, small), wooven (I suppose a woven pattern), or chind (a printed pattern). Other garments mentioned in the eastern trade are badgeas (jackets), caingulons (girdles), chawders (*chadar*, sheets or wraps). Chawders were worn very widely, and had various trade-subdivisions (brawl, champall, coria, pilgar, etc.), which I cannot distinguish with certainty.

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[1] Iam indebted to Mr. C. O. Blagden of the London School of Oriental Studies for much information regarding the Malay words mentioned in the text.

No detailed invoices, regarding this clothing trade have yet come to my notice, and consequently it is not altogether easy to get an idea of the grade of cloth handled. We have seen however that the calicoes and muslins sent eastwards were usually of the lower grades, and that the printed goods were commonly made of cheap cloth; while what that is known of the economic position in the East indicates populations of the some type as in contemporary India, an extravagant and luxurious upper class, very small in numbers, a minute and thrifty middle class, and relatively very large numbers of people living near the verge of hunger. The observed predominance of low-grade cloth was therefore inevitable, and the market for expensive goods cannot have been more thah retail. One is tempted to think of the ' painters and chinters ' of the period as a community of artists, expressing themselves individnally in a variety of new designs, but, so far as the export trade is concerned, such a view is negatived by what is known of their markets. Except in Japan, custom ruled to the exclusion of taste, and we must think of the bulk of the craftsmen as monotonously reproducing the stereotyped patterns which alone could be certain of a ready sale

The markets on the western side of India were less interested in specific articles. Those of which we hear in the Red Sea and Persian Gulf include elaborate turbans from Ahmadabad, dastmals and dustars (towels or napkins), rumals (handkerchiefs), isams or jasams (probably prayer-rugs), and eramees (conjectured to be *ihram*, the pilgrim's dress worn at Mecca). Nearly all of these were provided in Gujarat. Western Europe was also attracted by some of these goods. Rumals went largely to Amsterdam, but most of them were made in Bengal, either pure silk, or mixed silk and cotton, while cotton handkerchiefs and neck cloths were made up for England on the Coast. Quilts were also popular in Europe : the invoice prices for 100 square yards of quilt (that is, 200 square yards of cloth, together with the cotton quilted between them), range from 70 *f* for Surats to 100 *f* for Tuticorins.

There remains a list, longer than I like, of trade-names, regarding some of which I know only that they were sold in Java or further East, while of others I know nothing at all: the great majority of these, however, are mentioned so rarely that their importance in trade cannot have been very great. The list is not worth printing at length, but I shall be grateful to any one who can supply information, (not guesses, which I can make for myself), regarding blachees, bemimas, chirams, grobades, newlees, nilaes, petafrangees, perragrees, samudramoorees, or suckertons.

5. *Consuming Markets.*

The foregoing account of the goods handled by exporters may be supplemented by a brief survey of the demand in the various consuming markets. To begin with the Far East, China was no market at all, while Japan was quite exceptional as has been said above. Early in the century the English merchants there were unable to establish regular business on a large scale: a particular line of goods might take buyers' fancy, and sell well, but a second supply might prove unsaleable; and the Dutch, who after about 1625 enjoyed a practical monopoly of Japanese trade with India, took nearly fifty years to build up an appreciable business in cotton fabrics. Between 1660 and 1680 the statistics disclose a definite change, Japan taking at the latter date nearly one-tenth of all the cotton goods shipped by the Dutch Company from Batavia; I have not yet succeeded in finding any information as to the cause of the change, or the particular classes of goods which sold. Indo China bought chiefly from the Coromandel coast; detailed information regarding its demand is scanty, but red betilles, and an assortment of painted goods, were chiefly in favour. Siam bought calico from both sides of India mainly salempores and baftas; muslins came from the Coast; and a very long list is recorded of fancy goods, mainly painted, though Gujarat prints were also popular.

Of the island-markets, the Moluccas, Ceram Banda, and Amboina wanted mainly painted goods from the Coast. Borneo took a different assortment of the same goods. Macassar also looked mainly to Coast pintados, but here there was in addition a definite demand for red betilies, and for various calicoes and transformed goods from Gujarat. Java was so important as a distributing centre that its own tastes are somewhat obscure, but the usual wear seems to have been pintados of the distinctive Java fashion, which were also popular in the South-East of Sumatra The North and West of the latter island was supplied from Achin, and, unlike Java, depended almost entirely on Gujarat; here the chief demand was for blue or black calico, baftas or cannikens, and cheap calico at that, while slave-clothing, such as selas or muttfoons, also found a large market The trade to Ceylon was carried on in coasting vessels, the cargoes of which were not recorded in detail, and all that can be said is that the requirements of the population were met mainly from the south-eastern coast of India.

Across the Indian Ocean, South Africa at first offered no market at all, the native inhabitants wearing skins, when they wore anything. Late in the century assorted cotton goods were sent to the Cape for the Dutch settlers and their slaves, but the trade was quite retail. Along the whole coast of East Africa, nakedness was the rule, but, under the influence first of Moslem and then of Portuguese settlements, the wearing of clothes had made some headway by the opening of the 17th century. Apparently the movement did not continue: direct information is almost non-existent on this point, but the fact that the Dutch, who were engaged in capturing Portuguese trade throughout Asia, left East Africa severely alone shows at least that they did not consider its trade to be worth their while. The needs of the market, such as it was, were met from Gujarat, mainly in the form of dyed calico, cannikens, and other transformed goods. Further North, Abyssinia is spoken of as a potential market, but the only actual purchases I have traced were Gujarat dutties.

A much more important market was that furnished by the Red Sea ports, which supplied the West of Arabia, Egypt, and the adjacent parts of North Africa. The main off-take was of calico and ordinary muslin or turban-cloth, supplied chiefly from Surat and other ports on the western side of India, but also from Masulipatam direct. Much of the calico appears to have been somewhat superior, but dutties and cannikens also sold largely; I suspect these coarser goods were distributed round the Red Sea, and that the bulk of the finer cloth went farther, but my information on this point is not precise. The demand for fancy goods was relatively small, but allejais were popular, and it is in this trade that we meet eramees, a name which, as I have said above, appears to denote the dress worn by pilgrims at Mecca.

The trade to the Persian Gulf was generally similar to that of the Red Sea, with perhaps a larger proportion of ordinary calico, provided to a great extent from Lower Sind; apart from the Sind coasting vessels, the market was supplied mainly from Surat, but there were also direct sailings from Masulipatam. The North of Persia, and Central Asia in general, continued to obtain supplies of cloth overland, though increased facilities on the sea were reducing the volume of goods carried by this route; as might be inferred from what is known of the cost of transit, muslins and superior calicoes predominated, and we meet with the specialities of the Deccan and Bengal in the market of Lahore, where caravans were made up.

6 *Volume of Trade.*

Such was the general nature of the export trade in the 17th century as disclosed by contemporary records. There is nothing in it for shame, and nothing for rhapsody. A luxury-element indeed entered into it, for there were kings and courtiers to be provided for in the East, and this feature became more pronounced with the development of the European taste for prints and muslins, but in the main it was just a humdrum, useful, business, directed, so far as Asia was concerned, to supplying cheap clothes to poor people, who could not pay high prices, and whose taste was governed by custom. To estimate its volume is a matter of great difficulty. There is a substantial statistical basis, but it is too narrow for precision, and some of the invivisible factors can only be guessed. The most that can be offered is an estimate giving an idea of the order of magnitude, with a relatively wide margin for error.

The statistical basis is furnished largely by successive entries in the *Dagh Register*, the official journal of the Batavia administration, which show receipts from India, and consignments for various markets: these two sets of entries are quite independent, and, if they balance, there is a reasonable degree of certainty regarding the volume of trade handled by the largest single agency at work. Figures for a single year may be very misleading, because annual supply, though it was the rule, was not invariable: the Moluccas, for instance, might get two years' supply in one fleet, and nothing at all in the following year. The figures I give below relate to the Batavia trade in the years about 1680, taking three years into account, and reaching an annual estimate by averaging and rounding, after allowing for the recorded irregularities in supply. I take this period simply because the information I have found regarding it is fuller than for any earlier years.

Batavia trade in Cotton Goods—c. 1680.

Received from India		*Consigned to Markets*	
Source.	*No. of Bales*	*Destination.*	*No. of Bales.*
Bengal	500	Spice Islands	400.
Coromandel Coast	6,700	Japan	800.
South India	100	Macassar	100.
Surat	1,200	Java	1,000.
	8,500	Sumatra	800.
		Coasting	500.
		West of Cape	4,700.
			8,300.

The account balances fairly well, for at any rate 100 bales may be allowed for rounding, and an addition of 100, or even 200, bales to the large stock kept in the Batavia warehouses would not be matter for surprise To these figures must be added about 600 bales shipped from Colombo direct for Europe, and an uncertain but probably larger quantity sent direct from India to Malacca for distribution from that port; and allowing something for Dutch private trade, which was active, it is justifiable to take 10,000 bales as the approximate volume handled by the Dutch at this period.

By this time packing had been thoroughly systematised, as the detailed invoices show. The contents of a Dutch bale ranged from less than 1,000 *s. y.* of the stoutest fabrics to over 2,500 *s. y.* for muslim. The average contents of a bale, worked out separately for four cargoes, fairly representative of the general run of Dutch trade at this time, are 1363, 1393, 1403, and 1463 *s. y.*: a Dutch bale may therefore be reckoned as about 1400 *s. y.*, and their trade may be taken as somewhere about 14 millions of square yards at this period.

This English trade West of the Cape at this period much exceeded that of the Dutch. Analysing the annual indents, and assuming packing-efficiency equal to that of the Dutch, the exports work out at about 15,000 bales, with a possible error of up to 1,000 bales, due to uncertainty regarding the size of some pieces which were ordered in large quantities. The goods were on the whole much stouter than those exported by the Dutch, and, so far as I can calculate, would run about 1200 *s. y.* to the bale, giving a volume of about 18 millions of square yards for Europe alone. Taking together the total Dutch exports, and the English exports to Europe only, we have 25,000 bales, or 32 millions of square yards with a probable error of not more than 4 or 5 per cent.

For the remainder of the export trade the only data I have found are the Dutch reports of their rivals' activities. Much importance was naturally attached to these reports at Batavia, and they may be accepted as substantially accurate as far as they go, but unfortunately they do not go the whole way. They cover the trade of the French, Portuguese, and Danes, the private trade of the English, as well as the Company's exports to Asiatic markets, and much of the business of Indian, Javan, and Siamese merchants: their main defect is their obvious incompleteness regarding the markets in the Red Sea and Persian Gulf. To my mind the figures given in them justify the following conclusions: (*a*) the exports not yet accounted for certainly exceeded 10,000 bales; (*b*) it is highly improbable that they reached 25,000 bales; (*c*) the probable figure lies between 15,000 and 20,000 bales. It is probable that the average contents of a bale was considerably smaller than in the case of the Dutch, because many of the exporters were men of limited resources, who would not handle a large bulk of any particular line of goods, and would not have attained the same decree of efficiency in packing; no data on this point are avaialble, but an average of 1,000 *s.y.* is a reasonable guess.

The total annual export of cotton goods from India by sea at this period would thus be somewhere about 50 millions of square yards; it could scarcely be much less than 40, and it could exceed 60 only if the Dutch information regarding their rivals was much more imperfect than could reasonably be expected in view of the commercial efficiency of Batavia. The amount to be added for the land trade is quite uncertain, but is relatively small; using such data as are available for the number of transport animals, exports might conceivably have reached 3 million square yards, but I should guess half this figure to be nearer the truth

THE BOARD OF ECONOMIC INQUIRY, PUNJAB

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In these days when urgent appeals are being made both in the Council of State and in the Legislative Assembly for the appointment of a Committee to inquire into the economic condition of the people of India, it may be of interest to point out the steps already taken in the Punjab with a somewhat similar end in view. The Punjab can boast of no such institution as the Labour Bureau in Bombay; nor has it attained to the dignity of possessing an Industrial Intelligence Officer as we find in Bengal. The Labour Office in Bombay is probably without a parallel in India; in that Province we find a special department dealing with labour problems and statistics, with a well organised office of its own, highly paid officials and skilled investigators.

The Punjab has aimed less high, and, in view of the fact that the biggest economic problems of the Province are rural rather than urban, very grave objections might be raised against any imitation of the institution in Bombay. At the same time the Government of the Punjab is quite prepared to admit how ignorant we are on many matters of economic importance, and is desirous that enlightenment should be brought by careful, accurate and scientific investigation. The method by which it has sought to attain this end is somewhat new and novel and may be of interest to students of economics in other provinces.

In 1919, under orders from the Government of the Punjab, a Committee was formed to inquire into the economic condition of the agriculturists of the Province. At the meeting held to consider this question, it was generally agreed that an effort should be made to organise and co-ordinate work being done in the field of economic investigation. It was recognised that much of the valuable material daily being collected by Government officers in the course of their work did not receive the publicity it deserved, and there was further most noticeable lack of co-operation between the official and the on-official investigator. One of the results was that economic fallacies, many of them of a dangerous nature, sprang up and found ready circulation which under other circumstances might have been forestalled and would never have seen the light of day.

The idea, therefore, underlying the foundation of the Board was that it would be a distinct advantage to institue a permanent agency for undertaking and co-ordinating investigation of an economic nature in the Province, and to associate in this body both officials and representative public men whose work brought them into close contact with economic conditions in the Province. A recommendation to this effect—that it was 'highly desirable to establish a Standing Board of Rural Economic Inquiry for the Punjab..this Standing Board to have at its disposal an annual allotment of funds for expenditure on the payment of investigators, the encouragement of investigations and the publication of results'—was made to Government, and Government was pleased to accept it.

As a result the Board of Economic Inquiry was instituted. It was originally contemplated that it should deal primarily with rural conditions, but later it was agreed that urban considerations should not be omitted, and as a result the Board was split into two sections, one Rural, one Urban. The Hon'ble Minister of Agriculture (Lala Harkishen Lal) became Chairman of the Joint Board, and the two Financial Commissioners of the Province the Chairmen respectively of the two sections. The Board consists of 26 members, some of whom are members ex-officio, some nominated by Government, and some by representative institutions, e. g. the Punjab University, the banking institutions of Lahore, and the Press.

The Board, so constituted held its first meeting in December 1919, and outlined its functions as follows :—

1. to lay down lines of economic investigations ;
2. to co-ordinate the results of economic inquiries ;
3. to encourage and direct economic study and research ;
4 to publish economic material.

In the first three years of its existence the Board suffered under the disabilities which must necessarily attach to such a body working on a voluntary basis and composed of voluntary workers It had to start practically *ab initio* , and the first portion of its labours lay in the direction of sketching out and surveying the ground and making systematic preparations for scientific investigation. The results of such work do not, of course, show on the surface, but much valuable preparatory work was done. Another serious difficulty arose from the fact that many changes took place in the Chairman of the Rural Section—at first the Financial Commissioner (Revenue)—but this difficulty has been removed now that the Board has obtained permission to nominate its Chairman by name and not by office. The Board suffered a loss when Mr. J H. Towle, on his transfer from Punjab, relinquished the duties of Secretary of the Rural Section, and when, at a later date, Mr. Manohar Lal resigned the Secretaryship of the Urban Section. Professor Myles has now undertaken the Secretaryship of both Sections.

The present difficulty in which the Board finds itself is a very natural one in the light of its early history. When the necessary preparatory work was being done and Government was being generous with funds, the Board found it impossible to spend its allotment, and the unspent portion lapsed. When days of monetary stringency came along the axe was naturally laid to the root of a tree, which had appeared to be getting more substance than it could absorb, and the result is that now, with much of its preparatory work completed and in a position to spend economically, the Board finds itself in a rather impecunious position. The recent declaration by Government that the Board may henceforth be regarded as a non-official body will make possible the carrying over of the unspent balance of one year for work in the next. As regards the stringency, it is hoped that this will prove only temporary, and already a movement is on foot to increase by private donations the grant from Government. The future is, therefore, not without hope.

The Rural Section of the Board has prepared a valuable questionnaire for economic surveys of villages in different parts of the province. Much attention has been given to such problems as the actual size of holdings, the size of an economic holding under different conditions, the consolidation of holdings, the transfer of land, tenancies, the outturn of crops, the cost of cultivation, etc. Using this as the basis it is proposed to make a comprehensive survey of villages in different districts of the Province. The Rural Section has already published the results of "An Economic Survey of Certain Villages in the Hoshiarpur District '. The results of another inquiry into "The Milk Supply of Lahore", conducted in conjunction with the Punjab University, is at present in the Press. An inquiry into "The Size and Distribution of Holdings in the Punjab" is ready for the Press. Two inquiries are nearing completion, one a general economic survey of an area in the Kangra District, and the other an inquiry into Mortgages in the Ferozepur District and both of these should be published within a year. The Board has also taken up the much contested question of the Economic Value of the Goat in the Province, and hopes to be able to make some contributions upon this subject. A Subject Catalogue of the Economic Literature scattered throughout the Lahore libraries is also in preparation. As soon as funds permit this Section hopes to undertake further village surveys on the lines mentioned above. and also to investigate more fully the problem of rural indebtedness. All of the publications of the Board can be obtained from the publishers, the Civil & Military Gazette Press, Lahore.

The Urban Section of the Board has rather less to its credit, but, at present shows signs of increasing activity. It has already published a volume containing the results of investigations into "The Family Budgets of Low-paid Clerks", and has in manuscript the results of an inquiry into "Factory Conditions in the Punjab." There are at present various proposals for further inquiries, e. g. into the earnings of Tongawalas; into the profits of certain Retail Trades; the conditions of women workers in Ginning Factories; the form and constitution of *Mandis*.

The Board has up to date been dependent on its annual grant from Government, but it is hoped that as the work ot the Board becomes known this may be supplemented by private subscriptions. The funds are expended on the payment of investigators, and the publication of results. The members of the Board are all honorary workers, as is also the Secretary. It is the hope of all concerned that in the near future the Board will have furnished enlightenment on many economic problems of which we are at present remarkably ingnorant, and will pave the way in years to come for a comprehensive survey of "the economic condition of the people of India".

FORWARD EXCHANGE IN INDIAN BANKS

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The mysteries of Forward Exchange seem inscrutable to most of us, but the difficulty of the subject has been very much exaggerated.

Future dealing is fairly common in other markets. Every day American, Liverpool and Bombay cotton futures are published in the leading newspapers on the Commercial Telegrams page. The principle is just the same in the case of forward exchange. The price is fixed up before hand in a contract. No money passes at the time. *The actual transaction takes place later according to the stipulations, without any reference to the market conditions current at the time. The only difference is that in the case of exchange the money of one country has to be changed into the money of another, whereas in the other case, cotton is to be exchanged for money and *vice versa*.

We shall make our meaning clear by an example. Suppose a Calcutta merchant wishes to import some Christmas cards, laces, silk and other fineries worth in all, say £1000, by the beginning of December, say the 8th. He wishes to place the order in May in sufficiently good time when the exchange quotation is "Banks selling T. T. 1s. 4⅞d.' *If he buys now £1000 in advance for paying his bill in December, he will have to spend Rs. 14,222-3as-6p, immediately. If he cannot afford to lay out this amount for such a long time, he will have to take the risk due to fluctuations in exchange. Suppose the rate goes down to 1s. 4d. in

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*Sometimes a small deposit has to be made by one of the contracting parties by way of security. Banks generally insist on it in the mistaken belief that speculators will be excluded by this means. It should be remembered however that traders with inadequate resources are as likely to fail to "take up" there contracts as speculators. Securities should therefore be demanded in all doubtful cases. A word in favour of the much maligned speculators should be stated here. Trade, especially in an agricultural country like India, is seasonal. Speculative transactions act like buffers in a railway train, distributing the effect of commercial transactions evenly throughout the year.

* For an explanation of these ready quotations, see my article on "Foreing Exchange in Indian Banks" in the Calcutta Review for January, 1924.

December, he will have to spend Rs15,000 or Rs777-12-6p. more. This loss will be greater, if the exchage rate is still further depressed in December. In order to obviate this difficulty, he can fix up a forward contract with his banker in May, although the bill in respect of the imported goods will have to be paid in December. Suppose the rate fixed is 1s. 4 13/16d. He will then have to pay Rs.14,278 13as-6p. for the bill for £1000, whatever be the rate current at the time of payment of the bill. The importer can therefore fix his prices with his retailers on this basis, leaving some profit for himself.

Let us now consider the case of an exporter of hessians for £1000, who proposes to effect his shipment by the middle of November. He has to arrange with some local mill for the goods beforehand, say in May. In order to do this, he must be in a position to know how much he will get by negotiating his sterling bill. Suppose the list of quotations at the time states "Banks buying O. D. 1s. 5d." At that rate the proceeds of his bill for £1000 (supposing it to be a sight bill) would amount to Rs 14,117-10a 3p. If the rate goes upto 1s. 6d in November, he will get only Rs.13,333 5as-4p, involving him in a loss of Rs. 784-4a-11p. This loss he can avoid only by fixing up a contract beforehand with his banker at say 1s. 4 15/16d, and be can arrange with the mill accordingly.

It is thus clear that both the importer and the exporter can shift on to the banker the entire risk due to fluctuations in exchang. How can the banker carry this double burden? Well, it is this double burden which is his salvation. He can "marry" one contract with the other. Suppose he negotiates the hessians bill for £1,000 on the 20th Novemer at 1s. 4 15/16d, the rate stipulated, that is to say he pays out Rs. 14,169-11a-9p. The bill arrives in London 18 days later on the 8th Decembr, when it is immediately paid, because it is a sight bill. The banker instructs his London Office to pay out this £1000 to the exporter of Christmas goods on the same day, according to his contract He gets from the Calcutta merchant Rs. 14278. 13as-0p. @ 1s. 4 13/16d, as previously arranged. His sterling resources are not touched at all, the payment of £1000 being made in London as soon as the amount is received there. So far as his rupee transactions are concerned, he paid out Rs. 14,169-11a-9p. on the 20th November and received Rs. 14,278-13as-0p. on the 8th

December. He therefore earns Rs. 19-1a-3p by laying out Rs. 14,169-11a-9p for 18 days. His profit, regarding the two exchange operations, set off one against the other as simply lending and borrowing of rupees, is obout 16% per annum. This profit is not affected, whatever be the rate of exchange current in November or December. According to a Bengali saying, marriage means sweetmeats to everybody. The banker negotiating the "marriage" between the two contracts has sweetmeats in abundance—the profit almost of a profitter .

It is not always that the banker is in the happy position of being able to set off one contract with another in this advantageous way.* A good analogy is afforded by a cistern into which water is flowing in by one pipe and out of which water in escaping by another. These two pipes are connected with another cistern, the first pipe being an exit pipe from the second cistern and the second letting water into it. Obviously, the total volume of water in the two reservoirs must always be the same, although the volume in each will differ from time to time. One reservoir may be compared to the rupee resources, and the other to the sterling resources, of an Exchange banker. It should be his aim to maintain approximately the same funds all the year round at the two centres, Calcutta and London. But he cannot always do so. In fact he sometimes deliberately depletes the resources at one centre to augment those at the other. Towards the close of the busy season this year, in May last, the Imperial Bank rate stood at 8%, whereas the Bank of England rate was only 4%. The discount rates in London for the various usances were below 4%. All exchange bankers therefore converted as much of their sterling funds into rupees as they possibly could, to take advantage of the high rate of interest ruling in India. For a 'ready' or 'spot' sale, they quoted a higher rate than for a "Forward" sale. In other words, they were prepared to pay more sterling amount in exchange for the same number of rupees, if the transaction was put through in May than if it was done some time later. It is for this reason that forward rates must be at a discount below ready rates during the busy season. This discount gives a better index to the stringency in the money market than the Bank or Hundi rates.

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* These two operations are really doubles, one setting off or covering the other. They are also called 'Budla' or 'Budlee' transactions.

To fix our ideas, let us take an actual example. In the money Article of the *Forward* for May 25, 1924, it was stated:—

" The discount on forward rates is still pronounced For July/September deliveries the discount is from 1/8 to 5/32d; for October/November deliveries from 3/32 to 1/8d; for December/January deliveries from 1/16 to 3/32d ".

The Banks' Spot T. T. Selling rate then was 1s. 4 7/8d
On this basis and taking the first set of differences,
the T. T. Selling rate for July/September deliveries = 1s. 4 3/4d
October/November ,, = 1s. 4 25/32d
December/January ,, = 1s. 4 13/16d

Let us now see how these rates are arrived at. The Imperial Bank rate then was 8 per cent as already stated, and it was possible to employ funds in Calcutta at 8½ per cent. for two months. The Bank of England rate was 4 per cent., the t. q. discount rate in London for two months being somewhat lower, say 3/4 per cent. Thus by borrowing in London and lending in Calcutta, a profit of 8½-3¾ or 4¾ per cent. could be made. The interest on 1s. 4 7/8d at this rate for two months amounts to more than 1/8d. Thus the exchange bankers could safely quote 1/8 to 5/32d lower than the spot rates for deliveries two months forward. Similarly the rates for October/November and December/January deliveries may be verified It is therefore clear that if the exchange bankers can accurately forecast the money rates at the two centres, they can in the absence of disturbing factors fix the forward exchange contracts with mathematical precision for covering their spot transactions.

The chief disturbing factor is the psychological element that enters into commercial as well as speculative transactions. If there is a feeling in the market that sterling will appreciate in the near future on account of say a probable improvement in the London—New York Cross Rate, or in other words if there is a general belief that the rupee-sterling exchange rate is about to fall, importers will be anxious to buy sterling forward on the basis of existing high exchange rate and the exporters will not care to effect forward sales hoping to make an extra profit from the anticipated fall in exchange. The result will be that the discount for forward transactions as compared with spot operations described above will be diminished and may even be changed into a premium. Conversely, if traders and speculators think that the exchange rate will go up say on account of the fixing of the exchange value of the rupee at 2s. gold by the Government of India, importers will be deterred from making forward contracts and exporters will be eager to do so. The discount on the forward rates will therefore tend to be more pronounced.

SOME INDICES OF PRICES OF SECURITIES AND THEIR RELATION TO MONEY MARKET

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So far very little attention has been paid to the study of fluctuations in economic prosperity in India. An enquiry of this kind would be naturally so extensive as to cover the whole range of the economic life of the people. The difficulties of such a study are evident. One of the most serious obstacles is that, either the necessary data are not available, or, if available, cannot be had in a form which is of use for the purpose without considerable labour. These and other difficulties almost place this study beyond the efforts of the private individual. The study of the prices of securities is the result of an attempt to study fluctuations in economic prosperity in India. It is necessarily incomplete but it might prove of some interest even in its present form, particularly to those who intend to carry out thorough enquiry into the causes and nature of economic rythm.

Until recently no Index of the Prices of Securities was available. Sometime ago the Labour Gazette began publishing some monthly figures but they are not quite as useful as one would desire from the present point of view. Firstly, the Index does not go back far enough. Monthly figures begin towards the end of 1919. Secondly the classification of securities is not free from objection. There can be hardly any reason which would justify the omission of such groups as Jute, Tea, and Coal except that attention was confined to the activities of the Bombay Securities Market. So that was necessary for a general study of the prices of securities to prepare our own Indices and carry the calculations over a period long enough to yeild more or less conclusive results. The present figures have been calculated since 1910. Industrial Securities have been divided into five classes; Jute, Cotton, Coal, Tea and Miscellaneous. All kinds of industrial securities, not included in any other group, are included in the last. A general Index of Prices of Industrial Securities has been prepared by taking the average of the 5 groups. The average price for 1913 has been throughout used as the base and 100 is the par value in each case. (See Appendixes A. and B.)

An examination of the figures (Table I, Chart I), shows that since 1915 the prices of securities have gone up enormously. Profits made during the War gave prosperity and stability to Indian Industries But the prices of securities towards the end of the period under consideration are not as good an index of the prices of instruments of production or of the prosperity of the industries as during the earlier years. Usually a share represents a part of the capital goods and its value changes with the rate of return. But when concerns have laid by reserves, shares represents partly these reserves which form a constant element in their prices, and to that extent the prices of shares become independent of the rate of return. Therefore, it cannot be expected that, during recent years when most of the industrial concerns have built up large reserves as a result of the period of prosperity, prices of shares would be related to the rate of return and the prospects of industries, to the same extent as they were sometime ago.

Industrial and Fixed Interest Securities.

A comparison of the General Index with the Index of the Prices of Government and Corporation Securities, which we may call Fixed Interest Securities, (Table II, Chart II), shows that there is very marked negative correlation between the two. This is not only due to the fact that when the rate of return in industries rises people take their money out of the less remunerative investment and put it into the other but it is very largely due to the effect of an increase in the general rate of return on account of a wave of prosperity, on the capitalised value of the income from fixed interest securities. There is not quite as high a negative correlation between the general Index published by the Labour Gazette and Index of Fixed Interest Securities as in the former case. This appears to be due partly to the inclusion of the later Index in preparing the General Index and partly to the fact that the Labour Gazette General Index is not as representative of industrial conditions as the other one.

When the rate of return in industries rises a large part of the capital which flows into them takes the form of new concerns. It will be noticed in Table II that the Index of New Companies Registered rises with the General Index of the prices of Securities.

Seasonal Fluctuations.

Seasonal changes in the prices of shares of any group or industry might be due to various causes. They might be related to seasonal changes in the prices of raw materials, as in the case of those industries that use agricultural produce, such as Jute and Cotton; or they might be connected with periodic changes in the demand for manufactured goods; or to any other cause which can be used as the basis of operations by speculators. But there is very little likelihood that causes of this nature would affect all industries at the same time. So that the General Index of the Prices of Securities would have a tendency to be free from the effects of these causes. If any change is perceptible in the General Index, it would be due to changes in money market conditions, for this is the only cause which affects all Industries similarly.

The quantity of trade is not constant during the year, but the quantity of currency has not changed from season to season during the period under consideration.* The value of money, therefore, has not been constant. But the appreciation in the value of money has been connected with an increase in demand for money. It would, therefore, be expected that as the interest rate rose prices would fall. Seasonal Fluctuations in the interest rate and the General Index of Prices of Securities show a negative Correlation. (Tables, III, IV, V. Chart III). The average fluctuation in the General Index and Fixed Interest Securities Index taken together has a more marked negative correlation with changes in the interest rate than either singly. The total effect of changes in money market conditions is distributed between Fixed Interest and Industrial Securities and can only be represented by taking the changes in two kinds of securities jointly

While the average of the fluctuations in the two kinds of securities takes about a month to respond to changes in the interest rate, Fixed Interest Securities alone show a more ready response and Industrial Securities take from a month to two months to register the effects of changes in the interest rate. The seasonal changes in the interest rate are derived from Bank of Bengal rate on demand loans. It is only natural that Fixed Interest Securities would be more sensitive to these changes but it would take sometime before Bank of Bengal conditions filter down to the general monéy market and affect industrial securities. The prices of Industrial Securities would respond more quickly to the market rate of interest. But it is difficult to arrive at a definite idea of the market rate. Firstly, the figures are not easily available, Secondly, a number of rates prevail at the same time so that it becomes difficult to arrive at a general rate.

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*The provision for securing some elasticity in the quantity of currency, contained in the Paper Currency Act 192c could have no effect as interest rates up to the end of 1920 only are taken into account in calculating the Seasonal changes.

It is significant that changes in Fixed Interest and Industrial Securities are negatively correlated when a long period is taken into account but in regard to seasonal fluctuations, they are positively correlated. Any cause which would effect industrial prosperity or the rate of return favourably would have an adverse effect on the prices of Fixed Interest Securities. So that while the trends of the two kinds of securities would generally have a tendency to have opposite inclinations, seasonal changes would be more or less similar.

Psychological Factor and Seasonal Fluctuations.

Considerable attention has been paid to the effects of the psychological constitution of business men and industrialists on the course of trade cycles but it has not been generally recognised that this factor could have any influence on fluctuations that are due to seasonal causes. There is, however, no reason for believing that there will not be a tendency for the effects of the psychology of investors on changes in prices to be the same whether the initial causes of change be those that give rise to trade cycles or to seasonal fluctuations. The result of this tendency might remain dormant if the initial causes are not persistant enough to bring the psychological factor into existence. Primary causes which give raise to seasonal changes are short lived and whether there is a psychological element behind the changes which actually occur can only be decided by an examination of the figures.

So far as the effects of the shortage of money are concerned they should be similar both in the case of prices of industrial and fixed interest securites. But, the two kinds of security represent not only joint channels of investment, but channels which also compete against each other. An examination of the changes in prices of two kinds of securities (Chart III) discloses that sometime one characteristic and sometime the other is the more pronounced while the relative effect of each changes from month to month. This can be only due to psychological causes. From February to March the prices of fixed interest securities fall rapidly but prices of fixed interest securites rise although there is a general downward tendency. It appears that people on account of the fail of prices begin to think it safer to invest in fixed interest securities and take their money out of industrial securities to purchase the former Then as the interest rate continues to fall fixed interest securities appreciate in price while there is no effect on industrial securities. People do not seem to have regained confidence; but a month later the industrial securities rise far more rapidly than others and this tendency is continued for a few months. Then when money again becomes scarce, for sometime the change is gradual, but during the middle of January and December industrial securities fall very rapidly again while fixed interest securities fall throughout more or less gradually. It is not possible to explain these changes on any basis except that there are alternating waves of nervousness and confidence among those who invest in these securites.

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

Months.	JUTE.		COTTON.	
	Average Price.	Relative.	Average Price.	Relative.
1910				
January	125	94	215	81
February	125	94	222	84
March	125	94	211	80
April	124	93	212	80
May	124	93	212	80
June	124	93	209	79
July	122	92	212	80
August	121	91	214	81
September	123	93	212	80
October	123	93	206	78
November	124	93	194	73
December	121	91	195	74
1911				
January	119	89	193	73
February	117	88	195	74
March	116	87	193	73
April	116	87	189	72
May	117	88	198	75
June	116	87	225	79
July	115	87	204	77
August	112	84	201	76
September	115	86	169	64
October	114	85	207	79
November	112	84	222	84
December	112	84	228	86
1912				
January	110	83	224	85
February	119	89	229	87
March	119	89	228	87
April	120	90	248	94
May	120	90	249	94
June	120	90	254	96
July	124	93	254	96
August	131	98	273	103
September	135	102	288	109
October	139	104	291	104
November	140	105	298	113
December	140	105	278	106

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

COAL.		TEA.		MISCELLANEOUS.		GENERAL.
Average Price.	Relative.	Average Price.	Relative.	Average Price.	Relative.	Relative.
25	81	165	63	98	83	80
25	83	166	64	110	94	84
25	83	171	66	113	96	84
26	84	169	65	108	92	83
26	84	171	65	105	89	82
25	81	178	68	106	90	82
25	83	187	71	106	90	83
25	83	187	72	108	92	84
26	86	186	71	107	91	84
26	85	188	72	108	92	84
26	86	193	74	108	92	83
25	83	192	74	109	92	83
25	83	195	75	109	93	83
25	83	204	78	108	91	83
24	80	218	83	108	92	83
24	77	223	85	110	93	83
24	77	218	83	112	95	83
24	80	231	88	112	96	86
24	80	232	89	112	96	85
24	80	243	73	111	95	85
23	75	246	74	110	94	83
22	73	244	93	111	95	85
22	73	245	94	112	95	86
22	72	247	94	112	95	86
22	73	247	94	112	95	86
25	82	243	93	113	96	89
26	86	252	97	116	98	91
26	86	252	96	114	97	93
26	84	255	98	113	96	92
26	85	251	96	113	96	92
28	89	252	96	114	97	94
29	96	253	97	114	97	98
31	101	254	97	112	95	101
33	108	253	97	111	94	101
33	109	250	96	111	94	103
32	104	251	96	115	98	102

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

Months.	JUTE.		COTTON.	
	Average Price.	Relative.	Average Price.	Relative.
1913.		100		100
January ..	140	105	277	105
February ..	134	100	280	106
March ..	136	102	275	104
April ..	134	100	271	103
May ..	136	102	268	102
June ..	136	102	276	103
July ..	134	100	274	104
August ..	134	100	274	104
September ..	131	99	264	104
October ..	130	98	255	100
November .	129	97	238	94
December ..	125	94	253	84
1914.				
January ..	..	..	257	97
February ..	120	90	253	88
March ..	119	89	229	86
April ..	120	90	249	87
May ..	123	92	276	86
June ..	124	93	225	85
July ..	123	92	215	82
August ..	122	91	217	82
September ..	122	91	210	80
October ..	122	91	200	76
November ..	123	92	202	77
December ..	122	91	204	70
1915.				
January ..	122	91	181	69
February ..	129	97	176	67
March ..	148	111	180	68
April ..	147	116	184	70
May ..	167	122	194	71
June ..	180	135	197	70
July ..	187	140	196	68
August ..	187	140	180	67
September ..	202	152	177	70
October ..	..	..	184	72
November ..	208	173	191	72
December ..	284	213	198	75

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

COAL.		TEA.		MISCELLANEOUS.		GENERAL.
Average Price.	Relative.	Average Price.	Relative.	Average Price.	Relative.	Relative.
	100		100		100	100
32	103	247	95	117	99	101
32	105	247	95	117	100	101
31	103	240	92	114	97	99
30	99	247	95	114	97	99
31	100	249	95	117	99	100
31	102	261	103	117	100	101
31	101	276	105	108	100	102
31	100	275	105	119	101	102
30	99	274	105	116	99	101
30	98	276	106	121	102	101
30	97	273	104	120	102	99
29	93	270	103	121	102	96
						98
28	92	276	105	121	103	96
28	92	268	103	120	102	95
28	90	266	103	122	104	95
29	96	279	107	122	104	97
29	94	277	106	120	102	96
29	94	278	106	123	104	96
29	93	279	107	120	102	95
29	93	279	107	120	102	95
29	93	279	107	120	102	94
29	93	279	107	120	102	94
29	93	279	107	120	102	92
27	87	280	107	116	98	90
28	90	279	107	117	99	92
28	91	2 4	105	114	97	94
27	89	275	105	117	99	96
28	92	278	106	118	100	98
29	95	279	107	118	100	101
29	95	312	119	120	102	105
29	91	317	121	120	102	105
29	94	324	124	118	100	107
						113
30	97	319	122	118	100	112
30	97	323	123	118	100	121

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No I.

Months.	Jute.		Cotton.	
	Average Price.	Relative.	Average Price.	Relative.
1916.				
January ..	305	229	201	76
February ..	288	216	208	79
March ..	319	239	217	82
April ..	360	270	218	82
May	338	254	214	81
June	319	239	210	80
July	312	234	208	83
August ..	310	233	252	95
September ..	359	269	271	103
October ..	420	314	253	96
November ..	481	361	245	93
December ..	582	439	241	96
1917.				
January ..	444	333	236	90
February ..	329	247	230	88
March ..	327	245	239	90
April ..	310	232	232	90
May	287	214	214	81
June	349	262	224	85
July	412	309	243	92
August ..	416	312	251	95
September ..	500	275	258	98
October ..	490	367	264	100
November ..	501	376	92	111
December ..	469	363	96	109
1918.				
January ..	510	382	307	116
February ..	557	420	287	109
March ..	637	478	301	114
April ..	647	485	274	104
May	621	456	284	107
June	658	494	313	118
July	736	552	334	127
August ..	860	645	353	134
September ..	766	574	357	135
October ..	637	478	307	111
November ..	566	429	280	106
December ..	558	419	280	106

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

COAL.		TEA.		MISCELLANEOUS.		GENERAL.
Average Price.	Relative.	Average Price.	Relative.	Average Price.	Relative.	Relative.
31	100	318	123	120	102	126
31	100	313	120	118	100	139
30	98	309	118	117	100	127
30	97	307	117	134	117	137
30	98	308	118	144	122	134
30	98	332	127	139	118	132
30	98	339	129	137	116	132
31	102	337	129	139	118	134
35	115	337	129	143	122	147
35	116	338	129	156	133	158
40	132	338	129	159	135	170
46	152	335	128	194	165	196
45	193	334	128	194	165	182
40	168	334	128	189	161	158
39	163	334	128	183	175	156
37	160	326	125	181	154	152
36	157	326	125	171	145	144
38	162	316	121	168	143	154
38	163	315	120	168	143	165
37	156	315	121	183	156	168
37	159	310	119	204	173	180
38	162	309	118	201	171	184
40	171	309	118	222	189	193
41	172	309	118	242	205	191
40	170	311	119	241	205	198
38	162	309	118	248	211	203
37	158	305	117	260	221	218
38	163	305	117	269	228	219
39	164	300	114	264	273	215
38	161	291	111	284	242	225
42	177	291	112	279	237	241
44	186	292	112	288	245	264
46	196	287	110	293	250	253
45	192	289	111	274	233	255
46	195	287	110	256	217	211
45	194	282	108	233	198	205

AVERAGE PRICES AND INDICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

Months.	Jute.		Cotton.	
	Average Price.	Relative.	Average Price.	Relative.
1919.				
January ..	603	452	283	107
February ..	562	432	287	109
March ..	544	408	279	106
April ..	592	441	295	112
May ..	694	521	322	122
June ..	691	518	318	120
July ..	765	574	332	156
August ..	819	615	373	141
September ..	801	601	336	128
October ..	894	672	416	157
November ..	909	682	421	159
December ..	800	600	450	170
1920.				
January ..	879	659	534	202
February ..	835	626	579	219
March ..	817	613	640	243
April ..	906	680	737	279
May ..	917	709	720	273
June ..	853	640	692	262
July ..	935	701	645	244
August ..	1002	752	711	269
September ..	1058	794	656	248
October ..	1107	830	616	233
November ..	1018	763	619	235
December ..	900	675	618	234
1921.				
January ..	806	605	644	244
February ..	783	587	627	238
March .	640	479	576	218
April ..	620	455	511	205
May ..	494	370	583	221
June ..	526	395	609	231
July ..	531	399	667	253
August ..	477	358	698	265
September ..	574	431	695	264
October ..	590	443	758	275
November ..	505	380	658	249
December ..	431	323	588	223

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. 1.

COAL.		TEA.		MISCELLANEOUS.		GENERAL.
Average Price.	Relative.	Average Price.	Relative.	Average Price.	Relative.	Relative.
44	189	300	115	226	192	211
45	193	298	114	237	201	208
47	198	294	112	236	200	205
49	208	291	111	235	200	215
48	206	348	133	238	202	237
48	205	351	134	245	208	259
49	209	346	132	251	213	250
50	214	347	133	275	234	268
49	210	346	132	270	229	280
49	209	352	134	268	228	274
49	210	352	135	282	240	285
47	202	352	135	280	238	268
47	198	349	133	280	238	305
45	191	346	132	297	252	284
43	183	347	133	281	239	282
46	195	345	132	288	245	306
45	190	348	133	317	270	303
45	192	345	132	346	294	324
45	193	343	131	357	303	318
46	196	319	122	366	302	330
45	193	318	122	361	307	333
46	195	328	122	347	295	335
47	200	258	99	345	293	318
45	192	257	98	315	258	293
45	191	256	98	332	282	284
48	203	255	98	310	263	278
48	204	255	98	294	250	252
46	195	238	91	299	253	242
46	197	238	91	278	236	223
45	193	238	91	245	207	223
45	190	238	91	248	211	229
49	210	238	91	254	216	228
49	212	238	91	255	217	243
50	214	238	91	250	212	248
53	224	236	90	245	208	230
50	214	236	90	246	200	210

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

Months.	Jute.		Cotton.	
	Average Price.	Relative.	Average Price.	Relative.
1922.				
January	432	324	587	223
February	350	262	596	226
March	417	313	615	233
April	462	347	624	237
May	532	399	622	235
June	514	446	650	246
July	600	450	651	247
August	549	412	629	239
September	559	419	594	225
October	536	402	574	217
November	572	429	515	195
December	549	412	486	184
1923.				
January			441	168
February	554	416	471	179
March	549	412	268	140
April	524	394	408	154
May	503	378	400	152
June	503	377	389	148
July	481	361	398	151
August	408	306	396	180
September			415	157
October			395	149
November			384	146
December				

Note.—The average for the year 1913 was taken as the base in calculating the Index.

The figures are given correct only to the Unit.

The lack of correspondence between the Average Price and the Index which is sometimes apparent, is due to this fact.

AVERAGE PRICES AND INDICES OF PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. I.

COAL.		TEA.		MISCELLANEOUS.		GENERAL.
Average Price.	Relative.	Average Price.	Relative.	Average Price.	Relative.	Relative.
48	206	231	89	222	188	206
47	200	231	89	213	181	192
46	195	236	90	214	182	203
45	191	237	91	210	179	209
46	198	235	90	208	177	220
46	198	332	89	204	173	230
46	194	226	86	208	176	231
45	193	225	86	208	177	221
44	187	234	89	207	176	219
		230	88	201	171	213
42	180	246	95	200	170	214
43	184	254	97	200	170	207
42	179	253	97	197	168	205
41	175	254	97	190	162	106
40	172	256	98	187	159	196
41	175	268	103	183	155	196
41	174	265	101	180	153	192
40	171	269	103	191	163	192
39	167	325	124	191	163	193
38	164	375	145	188	160	185

Note.—The average for the year 1913 was taken as the base in calculating the Index.

The figures are given correct only to the Unit.

The lack of correspondence between the Average Price and the Index which is sometimes apparent, is due to this fact.

SOME INDICES OF SECURITIES AND REGISTRATION OF NEW JOINT STOCK COMPANIES.

Table No. II.

Months.	General Index of the prices of Securities.	General average of security prices. Labour Gazette.	Government and corporation securities (Fixed Interest.)	New Companies Registered.	
				Number.	Relative.
1910.					
January ..	80			12	58
February ..	84			13	62
March ..	84			15	72
April ..	83			21	100
May ..	82			13	62
June ..	82			14	67
July ..	83			10	48
August ..	84			19	91
September ..	84			12	58
October ..	84			14	67
November ..	83			20	96
December ..	83			16	77
1911.					
January ..	83			21	100
February ..	83			20	96
March ..	83			22	105
April ..	83			19	91
May ..	83			22	105
June ..	86			20	96
July ..	85			21	100
August ..	85			27	129
September ..	83			23	110
October ..	85			16	77
November ..	86			24	119
December ..	86			11	53
1912.					
January ..	86			27	129
February ..	89			22	105
March ..	91			28	134
April ..	93			12	58
May ..	92			22	109
June ..	92			19	91
July ..	94			24	115
August ..	98			25	120
September ..	101			28	134
October ..	101			27	134
November ..	103			19	91
December ..	102			33	158

SOME INDICES OF SECURITIES AND REGISTRATION OF NEW JOINT STOCK COMPANIES.

Table No. II.

Months.	General Average of the prices of Securities	General Average of Security Prices. Labour Gazette.	Government and Corporation Securities. (Fixed Interest.)	New Companies Registered.	
				Number.	Relative
1913.					
January	101			28	134
February	101			19	91
March	99			17	81
April	99			20	96
May	100			27	129
June	101			22	105
July	102			15	72
August	102			20	96
September	101			20	115
October	101			24	129
November	99			26	124
December	96			17	81
1914.					
January	98			18	85
February	96			20	96
March	95			39	190
April	95			1	5
May	97			6	29
June	96			5	24
July	96	100	100	9	43
August	95			7	34
September	95			3	15
October	94			10	48
November	94			13	62
December	92			8	39
1915.					
January	90			8	39
February	92			12	58
March	94			23	110
April	96			3	15
May	98			13	62
June	101			14	67
July	105	100	96	8	39
August	105			15	72
September	107			15	72
October	113			11	53
November	112			6	29
December	121			9	43

SOME INDICES OF SECURITIES AND REGISTRATION OF NEW JOINT STOCK COMPANIES.

Table No. II.

Months.	General Average of the prices of Securities.	General Average of Security prices. Labour Gazette.	Government and Corporation Securities. (Fixed Interest.)	New Companies Registered.	
				Number.	Relative.
1916.					
January ..	126	127	87	12	58
February ..	139			8	39
March ..	127			18	86
April ..	137			6	29
May ..	134			7	34
June ..	132			8	39
July ..	132			8	39
August ..	134			19	91
September ..	147			15	72
October ..	158			10	48
November ..	170			10	48
December ..	196			20	96
1917.					
January ..	182	151	73	26	124
February ..	158			17	81
March ..	156			12	58
April ..	152			23	110
May ..	144			17	51
June ..	154			17	81
July ..	165			15	72
August ..	168			16	77
September ..	180			19	91
October ..	184			17	81
November ..	193			15	72
December ..	191			15	72
1918.					
January ..	198	184	74	19	91
February ..	203			12	58
March ..	218			49	243
April ..	219			29	139
May ..	215			22	105
June ..	225			22	105
July ..	241			20	96
August ..	264			20	96
September ..	253			24	115
October ..	225			15	72
November ..	211			20	96
December ..	205			28	134

SOME INDICES OF SECURITIES AND REGISTRATION OF NEW JOINT STOCK COMPANIES.

Table No. II.

Months		General Average of the prices of Securities.	General Average of Security Prices Labour Gazette.	Government and Corporation Securities, (Fixed Interest.)	New Companies Registered.	
					Number	Relative
1919.						
January	..	211			35	167
February	..	208			32	153
March	..	205			43	205
April	..	215			24	115
May	..	237			30	143
June	..	259			21	100
July	..	250	206	77	44	210
August	..	268		76	44	210
September	..	280	211	71	79	377
October	..	274	221	70	65	310
November	..	285	235	70	71	339
December	..	268	252	68	73	348
1920.						
January	..	305	288	66	47	224
February	..	284	275	65	70	334
March	..	282	294	63	67	320
April	..	306	310	63	60	260
May	..	303	284	63	78	372
June	..	324	276	65	68	324
July	..	318	296	65	86	410
August	..	330	291	65	80	381
September	..	333	281	64	76	362
October	..	335	262	60	86	410
November	..	318	261	59	49	234
December	..	293	255	58	57	272
1921.						
January	..	284	262	61	67	320
February	..	278	259	61	70	334
March	..	252	238	62	43	205
April	..	242	252	62	68	324
May	..	223	256	63	61	291
June	..	223	261	64	76	362
July	..	229	295	65	59	281
August	..	228	289	65	73	348
September	..	243	295	65	42	200
October	..	248	292	65	46	220
November	..	230	284	66	43	205
December	..	210	276	67	51	243

SOME INDICES OF SECURITIES AND REGISTRATION OF NEW JOINT STOCK COMPANIES.

Table No. II.

Months.	General Average of the prices of Securities.	General Average of Security Prices Labour Gazette.	Government and Corporation Securities, (Fixed Interest.)	New Companies Registered.	
				Number.	Relative.
1922.					
January ..	206	263	66	50	239
February ..	192	251	63	59	281
March ..	203	253	63	67	320
April ..	209	246	62		
May ..	220	251	64		
June ..	230	264	64		
July ..	231	253	63		
August ..	221	253	63		
September ..	219	244	64		
October ..	213	231	64		
November ..	214	210	65		
December ..	207	201	65		
1923.					
January ..	205	206	65		
February ..	206	204	65		
March ..	196	185	67		
April ..	196	178	68		
May ..	192	176	71		
June ..	192	168	71		
July ..	193	169	72		
August ..	185	161	73		
September ..		159	73		
October ..		157	72		
November ..		156	71		
December ..		154	71		

NOTE :—The maximum figure in each series has been underlined. In the case of fixed interest securities the lowest figure is underlined.

The general Index of prices of securities and the Index of New Companies Registered has been calculated with the average for 1913 as hence while the General Index of security prices (Labour Gazette) and Fixed Interest securities Index, has been calculated with the figure for July 1914 as base.

SEASONAL FLUCTUATION IN THE GENERAL INDEX OF THE PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No III.

Years.	January.	February.	March.	April.	May
1910	96·0	100·8	100·8	99·6	98·4
1911	98·8	98·8	98·8	98·8	98·8
1912	90·3	93·5	95·6	97·7	96·6
1913	101·0	101·0	99·0	99·0	100·0
1914	102·9	100·8	99·8	99·8	101·9
1915	88·3	90·2	92·2	94·1	96·1
1916	87·4	96·4	88·1	95·1	93·0
1917	107·7	93·5	92·4	90·0	85·2
1918	88·7	90·9	97·7	98·1	96·3
1919	85·5	84·2	83·0	87·1	96·0
1920	97·6	90·9	90·2	97·9	97·0
1921	117·9	115·4	104·6	100·4	92·5
1922	96·2	89·7	94·8	97·6	102·7
Average for each month ..	96·0	95·8	95·1	96·5	96·5
Fluctuations from the average of 12 Months ..	-3·7	-3·9	-4·6	-3·2	-3·2
Average Fluctuation in the Industrial and Fixed Interest securities prices (Table V B.)	-2·3	-3·2	-3·4	-2·8	-1·6

SEASONAL FLUCTUATION IN THE GENERAL INDEX OF THE PRICES OF SHARES OF JOINT STOCK COMPANIES.

Table No. III.

June.	July.	August.	September.	October.	November	December.
98·4	99·6	100·8	100·8	100·8	99·6	99·6
102·3	101·2	101·2	98·8	101·2	102·3	102·3
96·6	98·7	102·9	106·1	106·1	108·2	107·1
101·0	102·0	102·0	101·0	101·0	99·0	96·0
100·8	100·8	99·8	99·8	98·7	98·7	96·6
99·0	102·9	102·9	104·9	110·7	109·8	118·6
91·6	91·6	93·0	102·0	109·7	118·0	136·0
91·2	97·7	99·5	106·1	108·9	114·3	113·1
100·8	108·0	118·3	113·3	100·8	94·5	91·8
104·9	101·3	108·5	113·4	111·0	115·4	108·5
103·7	101·8	105·6	106·6	107·2	101·8	93·8
92·5	95·0	94·6	100·8	102·9	95·5	87·1
107·4	107·9	103·2	102·3	99·5	99·9	96·7
98·0	100·6	102·2	104·1	104·5	104·3	103·6
-1·7	+0·9	+2·5	+4·4	+4·8	+4·6	+3·9
-0·3	+1·8	+2·2	+3·1	+2·4	+2·4	+2·0

AVERAGE MONTHLY BANK OF BENGAL INTEREST RATE ON DEMAND LOANS.

Table No. IV A.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.
1910	6·5	6·5	7·0	7·5	7·0	5·5	3·5	3·5	4·0	5·0	6·5	7·5	
1911	7·5	8·0	8·0	7·5	7·0	5·0	4·5	4·0	4·75	5·5	5·5	5·5	
1912	7·0	8·5	7·5	6·5	6·0	5·0	4·0	3·5	4 0	5·0	6·5	7·5	
1913	8·0	8·0	7·5	7·0	6·5	5·5	4·0	4·5	6·0	6·5	7·0	7·5	6·
1914	7·5	7·5	7·0	5 5	5·5	5·0	4·0	4·25	5·5	5·5	6·0	6·5	
1915	6·5	6·5	6·5	6·5	6·5	6·0	5·5	5·5	6·0	6·5	6·5	6·5	
1916	8·0	8·5	8·5	8·0	7·5	6·0	5·5	5·5	6·0	7·0	8·0	8·5	
1917	8·5	8·0	7·0	6·5	6·5	6·5	6·5	6·5	6·0	5·5	5·5	5·5	
1918	6·0	6·5	6·5	6·5	6·0	5·5	5·5	5·5	5·5	5·5	6·0	6·5	
1919	7·0	7·5	7·0	6·5	6·5	6 0	5·5	5·5	5·5	5·5	5·5	5·5	
1920	6·0	7·0	7·5	7·5	7·5	7·0	5·5	5·5	5·5	5·5	6·5	7·5	

INDEX OF THE BANK OF BENGAL INTEREST RATES ON DEMAND LOANS (BASE : AVERAGE FOR 1913.)

Table No: IV B

Year	January	February	March	April	May	June
1910	100·0	100·0	107·8	115·5	107·8	84·7
1911	115·5	123·2	123·2	115·5	107·8	77·0
1912	107·8	130·9	115·5	100·0	92·4	77·0
1913	123·2	123·2	115·5	107·8	100·0	84·7
1914	115·5	115·5	107·8	84·7	84·7	77·0
1915	100·0	100·0	100·0	100·0	100·0	92·4
1916	123·2	130·9	130·9	123·2	115·8	92·4
1917	130·9	123·2	107·8	100·0	100·0	100·0
1918	92·4	100·0	100·0	100·0	92·4	84·7
1919	107·8	115·5	107·8	100·0	100·0	92·4
1920	92·4	107·8	115·5	115·5	115·5	107·8

SEASONAL FLUCTUATION IN THE INTEREST RATE FOR DEMAND LOANS.

Table No . IV C.

Year	January	February	March	April	May	June
1910	112	112	120	129	120	95
1911	124	131	131	124	116	82
1912	119	144	128	110	102	85
1913	123	123	116	108	100	85
1914	130	130	121	95	95	86
1915	104	104	104	104	104	96
1916	109	116	116	109	103	82
1917	130	122	107	99	99	99
1918	101	109	109	109	101	92
1919	116	124	116	107	107	99
1920	91	107	115	115	115	107
Average	114·5	120·2	116·7	109·9	105·7	91·6
Fluctuations from the average of twelve months.	+15·7	+21·4	+17·9	+11·1	+6·9	- 7·2

INDEX OF THE BANK OF BENGAL INTEREST RATES ON DEMAND LOANS.
(BASE : AVERAGE FOR 1913.)

Table No : IV B

July	August	September	October	November	December	Average
53·9	53·9	61·6	77·0	100·0	115·5	89·8
69·3	61·6	73·2	84·7	84·7	84·7	93·4
61·6	53·9	61·6	77·0	100·0	115·5	91·1
61·6	69·3	92·4	100·0	107·8	115·5	100·0
61·6	65·5	84·7	84·7	92·4	100·0	89·5
84·7	84·7	92·4	100·0	100·0	100·0	96·2
84·7	84·7	92·4	107·8	123·2	130·9	113·3
100·0	100·0	92·4	84·7	84·7	84·7	100·7
84·7	84·7	84·7	84·7	92·4	100·0	91·7
84·7	84·7	84·7	84·7	84·7	84·7	93·3
84·7	84·7	84·7	84·7	100·0	115·5	100·7

SEASONAL FLUCTUATION IN THE INTEREST RATE FOR DEMAND LOANS

Table No : IV C

July	August	September	October	November	December	Average
60	60	69	86	112	129	
74	66	78	91	91	91	
68	59	68	85	110	128	
62	69	92	100	108	116	
69	73	95	95	103	112	
88	88	96	112	128	136	
75	75	82	96	109	116	
99	99	91	84	84	84	
92	92	92	92	101	109	
91	91	91	91	91	91	
84	84	84	84	99	115	
78·5	69·7	85·3	92·3	103·3	111·6	
—20·3	—29·1	—13·5	—6·5	+4·5	+12·8	

INDEX OF THE PRICES OF GOVERNMENT AND CORPORATION SECURITIES (FIXED INTEREST).

Table No. V A.

Year	January.	February.	March.	April.	May.	June.
1920	66	65	63	63	63	65
1921	61	61	62	62	63	64
1922	66	63	63	62	64	64
1923	65	65	67	68	71	71

SEASONAL FLUCTUATION IN THE INDEX OF FIXED INTEREST SECURITIES.

Table No V. B.

Year.	January	February.	March.	April.	May.	June.
1920	104	103	100	100	100	103
1921	96	96	97	97	99	100
1922	104	99	99	97	100	100
1923	93	93	96	97	102	102
Average.	99·2	97·7	98·0	97·8	100·2	101·2
Fluctuations from the average of twelve months.	–0·9	–2·4	–2 1	–2·3	+0·1	+1·1

INDEX OF THE PRICES OF GOVERNMENT AND CORPORATION SECURITIES (FIXED INTEREST).

Table No. V A.

July.	August.	September.	October.	November	December.	Average.
65	65	64	60	59	58	63·0
65	65	65	65	66	67	63·7
63	63	64	64	65	65	63·8
72	73	73	72	71	71	70·0

SEASONAL FLUCTUATION IN THE INDEX OF FIXED INTEREST SECURITIES.

Table No. V B.

July.	August.	September.	October.	November.	December.	Average.
03	103	101	95	93	92	
102	102	102	102	104	105	
99	99	100	100	102	102	
103	104	104	103	102	102	
101·8	102·0	101·8	100·0	100·2	100·2	100·1
+1·7	+1·9	+1·7	−0·1	+0·1	+0·1	

APPENDIX A.

As the significance of figures is never quite clear unless it is known how they have been arrived at, some details of the manner in which indices that have been used were calculated are given here.

Indices of Prices of Securities.

The Indices of Prices of Securities are based on The Weekly Share Market Report published by the "Pioneer". The list of Joint Stock Companies taken into account in preparing the indices for each group is given in Appendix B. The average of two quotations —one about the 10th of the month and the other about the 20th— was taken as the monthly figure for each company. The average of these monthly figures for all companies in a group was taken as the average price of the shares of that group. The index was calculated with the average for the whole of 1913 as the base and the par value in each case was taken as 100. The General Index was obtained by taking the average of group indices.

Season Fluctuations.

Season fluctuations were calculated by expressing the figure for each month as a percentage of the average for that year and then taking the average of these percentages for each month for the whole period under consideration.*

Interest Rates.

The interest rate taken as the basis of calculation is the average of the Bank of Bengal rate against Government Securities and against the deposit of goods. Index and seasonal changes were calculated in same manner as described above.*

Fixed Interest Securities.

This Index has been taken from the Labour Gazette. Seasonal changes were calculated in the same way as in the former cases.

* See Tables III and IV.

APPENDIX B.

LIST OF JOINT STOCK COMPANIES TAKEN INTO ACCOUNT IN CALCULATING THE GENERAL INDEX OF THE PRICES OF SHARES OF JOINT STOCK COMPANIES.

Jute Companies.			Rs.	
1.	Alliance	Face Value	100	
2.	Aukland	,, ,,	100	
3.	Belvedere	,, ,,	100	Split into 2 since 1918. Multiplied by 2.
4.	Clive	,, ,,	50	later 10/ multiplied by 2 and 10.
5.	Gaurepore	,, ,,	100	200 added Since April 1920.
6.	Kmarhatty	,, ,,	100	
7.	Howrah	,, ,,	100	later 10/ multiplied by 10 :
8.	Kennison	,, ,,	100	
9.	Lawrence	,, ,,	100	

Cotton Companies.			Rs.	
1.	Ahmadabad Advance	Face Value	100	
2.	Century	,, ,,	100	
3.	Central India	,, ,,	100	
4.	Colaba	,, ,,	100	
5.	Emperor	, ,	500	multiplied by 1/5
6.	Indore Malwa	,, ,,	100	
7.	Kohinoor	,, ,,	500	multiplied by 1/5.
8.	Lakshmi	,, ,,	1,000	,, by 1/10.
9.	Manookji	,, ,,	1,000	,, by 1/10.
10.	Swadeshi	,, ,,	100	

Coal Companies.			Rs.	
1.	Adjai	Face Value	100	Multiplied by 1/10.
2.	Aidin	,, ,,	100	,, by 1/10.
3.	Baraboni	,, ,,	10	
4.	Bengal Coal	,, ,,	100	,, by 1/10
5.	Bengal Nagpur	,, ,,	10	
6.	Bokars Ramgarh		10	
7.	Burrakar Coal	,, ,,	10	
8.	Gopalichuk	,,	10	
9.	Katras Jheria	, ,	10	
10.	New Beerbhoom	,, ,,	10	
11.	New Meubhoom	,, ,,	10	
12.	Ranugan'	,, ,,	10	
13.	Sendra	,, ,,	10	
14.	Union	,,	10	

Tea Companies :—			Rs.	
1.	Banarhat	Face Value	100	
2.	Bhatkawa	,, ,,	100	later 10 multiplied by 10:
3.	Bhotiachang	,, ,,	100	
4.	Curran Duars	,, ,,	100	
5.	Enga Duars	,, ,	100	

6.	Hatpara	,,	100	later 10 Multiplied by 10
7.	Haithikhii	,,	100	,, 10 ,, by 1
8.	Haldiba	,,	100	
9.	Mothola	,,	100	
10.	Nagaisuri	,,	100	
11	New Cinnatolia	,,	100	
12.	Choonabhat	,,	100	
13.	Okoyti	,,	100	
14.	Pashak Darjeeling	,,	100	
15.	Teesta Vallay	,	100	
16.	South Cachar	,	100	
17.	Rangli Ranglis	,,	100	
18.	Titabar	,,	100	
19.	Tukwar	,,	200	multiplied by 2.

Miscellaneous Companies.

			Rs.	
1.	Bengal Flour	Face Value	100	
2.	Bengal Paper		25	Multiplied by 4.
3.	Bengal Telephone	,,	100	Later 10 multiplied by 30 probbably Capital increased.
4.	Burn & Co. 7% Pref.		100	
5.	Calcutta Tramways		£5	
6.	Cawnpore Sugar		100	Later 10 Multiplied by 10.
7.	Ganges Rope		100	
8.	Sutna Stone & Lime		100	
9.	Titagarh Pape		100	Later 10 Multiplied by 10

THE RELATION OF HOUSE ACCOMMODATION TO CHILD-MORTALITY.

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In no sphere have the effects of congestion been more marked than on the life and well-being of the infants of the country. It is however only recently that the subject has received any attention in responsible quarters. With the inauguration of the All-India Baby week by Her Excellency Lady Reading last year, the gravity of the problem has been prominently brought to the notice of the general public. The welfare of the infants is always the prime duty of the State because on them rests not only the whole future prosperity of a nation but also its very existence. It is not however sufficiently realised that the growing congestion in our industrial towns is one of the main causes of this extravagant waste of human life and energy.

According to the latest report of the Public-Health Commissioner with the Government of India 1,346,280 children died in British India in the year 1922 before they attained the age of one. The Commissioner has rightly pointed out that "Infant mortality is a sensitive index of the health conditions especially as regards general sanitation under which the people live; it is these conditions which require attention if any real influence on infant mortality and on the health of a nation is to be exercised. That close on a quarter of the total deaths should be those of infants is a clear indication that a clean environment—the first essential of health—is neglected. Infants respond to the nature of the environment more readily than human beings at later periods of life; and a rise in the percentage of infantile deaths to total deaths means that the epidemic diseases which affect adults to a greater degree have been less prevalent. Although the infantile death-rate per thousand births registered during the year fell from 198 to 175 in 1922 as compared with 1921, it is important to note that the percentage of infant mortality to total mortality increased considerably. In other words the deaths of infants below the age of one increased as compared to deaths at other ages

Whereas in 1921, 208 out of every 1000 persons who died were below the age of one in 1922 no less than 232 belonged to the same age-group. This shows that the apparent decrease in infant mortality during the last few years has not been accompanied with any appreciable improvement in maternal conditions or in the overcrowded and insanitary surroundings in industrial cities.''*

It would be interesting to compare the infant mortality rate and the percentage of infant mortality to total mortality of great Britain and India. In 1921 the percentage of infantile deaths to total deaths in England was only 15.3 while the ratio to 1,000 births was 83 which has further fallen to 77 in 1922

The following is a comparative table of infant mortality in India and England.

Place		Percentage of infant mortality to total mortality.		Ratio of infant mortality to 1,000 births.	
		1921	1922	1921	1922
India ..	..	20·8	23·2	198	175
England and Wales	..	15·3	..	83	77
Bombay City	..	23·8	22·1	667	403
Calcutta City	..	17·6	19·4	330	287
Cawnpore City	..	..	33·8	580	451
London ..	..	14·4	..	81	..

It is clear from these figures that not only is the infant mortality rate in England considerably below half the rate in India but the percentage of infant mortality to total mortality is also well below that in India. The contrast in Indian and foreign cities is still more marked. Whereas in 1921 two out of every three children born in Bombay and Cawnpore died before attaining the age of one, in London hardly one in twelve suffered a similar fate.

It is again noteworthy that almost half of the total deaths of infants in British India (48.8 percent), occurred during the first month of life and about one-third in the first week.

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* Report of the public Health Commissioner with the Govt. of India for 1922 Vol. I pp. 88–89. Cf. also Newman.

The following table gives the exact percentages of deaths in the various age-groups to total infant mortality in 1922.

Provinces.	Under one week	Under one month	1-6 Months	6-12 Months	Infant mortality rate	Rate in 1921
Bengal ..	..	47·5	24·3	28·2	187· 7	206·1
United Provinces	33·9	52·8	30·0	16·8	183· 8	265·8
Bihar & Orissa	40·5	56·6	27.5	15·9	139· 9	191·4
Madras ..	31·7	48·5	22·3	29·2	166· 4	166·0
Bombay ..	23·6	41·3	33·9	24·8	169· 1	178·1
Central Provinces	29·4	49·8	27·8	22·4	228· 7	279·5
N.W.F. Provinces	18·8	34·7	32·8	32·5	151·47	195
Burma ..	16·1	32·3	46·6	21·1	185· 3	172
Coorg ..	45·5	58·1	22·6	19·3	272· 5	225
Ajmer-Merwara	18·9	33·1	35·0	31·0	208· 2	256·3
Punjab ..	..	46·7	27·8	25·5	169·58	191·6
Assam ..	..	50·2	32·2	17·6	198· 2	188·5
Delhi ..	..	34 6	33·8	31·6	180·26	217·2
Total Br. India	..	48·8	28·3	22·9	175·09	197·9

A study of the above table would show that 77.1 percent of the total infantile deaths in British India occur within the first SIX MONTHS OF LIFE. Some of the provinces especilly Bihar & Orissa, Assam, and the United Provinces record considerably higher proportions. While poverty, ignorence and bad social customs have undoubted effects upon general health and longevity the causes of a high infant mortality rate and a large number of deaths within a short time of birth lie mainly in the dark, dingy rooms in which the mother and the child have to spend the major part of this period, and the impure atmosphere which they breathe at this delicate time of their life. The following table gives the percentages of infant deaths occurring within one month to total infant mortality in some Indian Cities:—

CITIES	Infant mortality per 1000 births	Percentage of deaths within one month
Bombay City	403	39
Calcutta City	287	50·9
Cawnpore	451	50·5
Rangoon	328	50

A high percentage of deaths in infants under one week indicates exhaustion and weakness in the mother and unsatisfactory conditions attending-childbirth and that under one month indicates low vitality in the infant over and above the other causes. Impure air and dirty surroundings are chiefly responsible for deaths between one and three months, while mal-nutrition, bad water, carelessness and foul atmosphere are generally responsible for infantile deaths over three months.

The following table gives the percentage of deaths in different age-periods to total deaths in the first year of life in the cities of Bombay & Calcutta.

CITIES	Percentage of deaths within one year.					Infant mortality per 1,000 births	Death rate (per 1000 population)
	Under one week	Under one month	1 to 3 months	3 to 6 months	6 to 12 months		
Calcutta	33	50·9	13·4	12·8	22·9	287	29·1
Bombay	23	39	..	27	33	403	32·13

The figures are significant. Death within a month of birth and more so within a week is obviously due to maternal conditions which are inseparably connected with the environment. Overcrowded conditions and insanitary surroundings are bound to affect the delicate nerves of the babies and the frail mothers. The result is that the babies are weak and sickly when they are born and lack the vitality to stand the stuffy atmosphere of damp and dreary rooms impervious alike to fresh air and sunshine. In the bigger industrial and commercial cities such conditions end in appalling infant mortality rates. The same facts are corroborated by an analysis of causes of infantile deaths at different age-periods. Thus debility, premature-birth and respiratory diseases cover in themselves almost three-fourths of the total infantile deaths in Bombay City. Conditions in the other industrial cities are not appreciably different. The following table gives the percentages of infantile deaths from principal causes at several age-periods in 1923 in the city of Bombay :—

Age-period	Small-pox	Dysentery and Diarrhea	Debility & premature birth	Respiratory diseases	Convulsion	Other causes	All causes
Under 1 week	..	1·20	92·24	0·60	2·89	3·05	100·00
1 to 4 weeks	..	7·50	81·86	2·09	5·81	2·70	100·00
1 to 6 months	1·23	10·21	26·46	32·42	23·36	6·28	100·00
6 to 12 months	1·95	11·29	8·30	53·26	14·05	11·00	100·00
Total under 1 year	1·30	8·20	43·63	27·66	12 81	11·42	100·00

In England particularly and in Europe and America in general town-planning and sustained welfare work coupled with improved sanitation and strict supervision of slum dwellings and other condemned houses have reduced infant mortality to very low figures. It is deplorable, to find that conditions in India are improving very slowly if at all.

The following table gives the infant mortality rates per 1,000 births in England and India from 1911 to the present day.

	England	India
1911	130·1	252·8
1915	109·72	221·9
1919	89·13	224·5
1921	83·0	197·9
1922	77·0	175·1

THE CITIES BRING OUT STILL GREATER CONTRASTS

The following table gives the infant mortality rate per 1,000 births in some Indian cities in 1921 and 1922. A few statistics for foreign cities are added for comparison.

Towns	Infant mortality per 1,000 births.	
	1921	1922
Bombay	667	403
Calcutta	330	287
Madras	281·9	308
Rangoon	322	328
Howrah		250
Poona	876	1,064

Ahmedabad	348		299
Karachi	270		252
Cownpore	580		451
Benares	319		264
Lucknow	331		280
Nagpore	358		275
Berlin		135	
Liverpool		117	
Manchaster		111	
Birmingham		104	
Paris		95	
London	81		
Portsunlight		78	
New York		71	
Christiania		54	

The figures speak for themselves and comment seems superfluous. It should however be pointed out that the evils of such a high mortality do not end with the permanent loss of the equivalent man-power of the country, because the causes which bring about the death of some weaken and deteriorate the health and physique of the others. Thus not only is the energy of those engaged in the production of the child wasted but the mothers are left enfeebled and depressed. The evil does not rest there because such diseases are generally infectious and carry their germs to other members of the family and to neighbours. The conjested and dirty surroundings contribute to the spread of the infection. Thus the gloom spreads throughout the city.

We ought to mention that we do not ignore other subsidiary causes which lie at the root of this appalling child mortality. The poverty and ignorance of the people, the *purdah* system which compels the women to resort to the innermost apartments from which air and sunshine are completely shut out, early marriage and above all ignorant and inefficient mid-wifery, all go to aggravate the evil. But there can be no doubt that conjestion coupled with unhygienic and filthy surroundings is the chief cause of this extraordinarily high mortality.

In her final report to the Bombay Legislative Council in 1922 on maternity benefits to female industrial workers, Dr. Barnes, the Lady Doctor, speaks of cases of a room being occupied by several families together. In one such room, 15 feet by 12 feet, she found six families living. Each one of the families had a separate oven for itself, and the total population of the room was thirty including adults and children. Three out of six of the women who lived in that room were shortly expecting to be delivered. On being questioned as to how she would arrange for privacy in that room, the District Nurse pointed out a space, 3 feet by 4 feet, screened off by old rags and sacks from the rest, which served the purpose. " The atmosphere at night of that room " remarks the Lady Doctor, " filled with smoke from the six ovens and other impurities would certainly physically handicap any woman and infant both before and after delivery." She continues "In a room in the basement of the house, conditions were far worse. Here daylight with difficulty penetrated, sunlight *never*, and sunlight we know is inimical to the life of most pathogenical organisms." She concludes with a pathetic statement that "the hours spent in the mills were healthier and more hygienic for the women industrial workers than those in their own chawls....and that notwithstanding the fibre-laden atmosphere in the work-rooms, these women had better places to work in than in their own chawls where every ventilation space was packed to avoid the ingress of fresh air, and where for some 14 hours of the 24 the family inhaled an atmosphere laden with smoke and other impurities." Common sense demands and social and hygienic principles enjoin that a family should have at least one room to itself for permanent residence. It might be possible for a family to accommodate friends and relatives temporarily or even for a longer time if poverty and pressure of space demands it; but it is hardly conceivable for two families or more to live permanently in only one room with any amount of decency.

In Bombay out of 175,001 single-roomed tenements no less than 1955 accommodate two families a-piece and as many as 1171 shelter more than two families each. No wonder that the babies in these places are born only to die. A study of infant mortality rates in the principal industrial cities of India by wards would reveal the extent of mischief that over-crowding and insanitation cause.

The following tables indicate the infant mortality rates per 1,000 births by wards in the principal industrial and commercial cities in India :—

	1920	1921
Calcutta City	386	330
Jorabagan	628	657
Collinga	617	538
Fenwick-Bazaar	786	486
Jorasanko	428	483
Sukea	401	481
Kidderpore	582	465

	1920	1922	1923
Bombay City	556	403	411
Market	995·6	383	419
Mandvi	800·5	556	521
Byculla	725·7	613	548
Chukla	677·3	426	410
Sewri	665·9	514	462
Kamathipura	649·5	392	406
Bhuleshwar	642·8	454	429
Second Nagpada	623·8	520	521
Fort South	250	461	421
Rangoon (1922)	328		
North Kemmendine	348·24		
Lanmadaw	284·78		
Taraktan	349·36		
Yegyaw	333·33		
Theinbyu	336·21		
Cantonment	576·92		
Dala	219·27		
Kanaungto	389·67		
Tamwe	379·75		
Botatung	244·53		
North-East town	241·53		

	1920	1921	1922	1923
Ahmedabad City.				
Khadia	403·3	330·4	403·1	314·2
Kalupur	345·6	341·8	374·4	317·0
Driapur	389·0	335·9	311·2	305·0
Shahpur	331·3	329·3	282·9	294·5
Jamalpur	363·4	302·9	354·0	300·1
Raikhad	340·8	272·0	284·3	317·3
Pura	342·7	323·1	277·1	231·0
Karachi City				227·0
Old Town				202·0
Napier				243·0
Machi Miani				243·0
Market				228·0
Lyari & Trans Lyari				238·0
Rambaugh & Serai				185·0

	1920	1921	1922	1923
Ranchore, Ramswami, & Bigai Khata ..				252.0
Sadat Bazaar & Preedy ..				166·0
Civil Lines & Frere Town ..				152·0
Gizri ..				289·0
Garden, Soldier Bazar, Cuarry & Bhishtiwara ..				251·0

	1920	1921	1922	1923
Lucknow City	291.6	330.7	282.9	284.9
Chauk	286.59	294.9	286.2	290.1
Yahiagunj	333.99	267.9	310.8	308.8
Saadatgunj	295.96	343.6	319.3	283.2
Daulatgunj	317.38	357.7	298.9	268.7
Hassangunj	285.1	370.8	282.0	239.3
Ganeshgunj	241.5	295.4	279.2	267.7
Hazaratgunj	289.8	319.9	284.3	285.6
Wazeergunj	311.09	329.4	282.2	304.3
Hospitals	43.01	73.2	96.45	157.9
		580.7	450.9	495.2
Cawnpore City				
Gwal Toli & Allengunj (settlements of Cooper Allen & Co.)		1,671.6	550.4	460.1
Etawah Bazrar		578.9	1,112.5	700.0
Hijra Mohal		1,166.7	1,200.0	500
Nachgher		432.1	840.4	723.8
Lokman Mohal		736.8	571.4	641.5
Dalmandi		1,142,9	812.5	900.0
Fielkhana		1,875.0	866.1	545.5
Collectorgunj		1,250.0	454.5	823.5
Collectorgunj		1,550.0	730.2	746.8
Colie Bazaar		441.9	572.5	595.9
Chungighat & Couperganj		5,00.0	5,00.0	4,00.0
Purva Hiraman		3.55.6	513.8	789.1
Civil Lines & M. C. Robertgunj (Lalimli Settlements)		420.6	440.9	345.9
Civil Lines		362.1	328.8	279.2

It will be clear from the tables given above that the more congested quarters are suffering from a considerably higher infant mortality rate than others. It is a matter of surprise that in some of the Cawnpore Mohallas infantile deaths exceed the total number of births. The fact is that there is a constant immigration of men and women sometimes with small children from the surrounding country to Cawnpore like other industrial cities for the sake of employment. The atmosphere of the *bustees* in which they have to put up in places like Cawnpore more often than not seals the fate of the babies used to fresh air and light. In such cases the effect of over-crowded and insanitary conditions on the infant death-rate is evident and no words are needed to enlarge upon its ghastly significance. It is however of special importance to us in as much as Cawnpore is practically the solitary example in India of an industrial city which is beginning to have a settled industrial population in the city itself. The appalling results of Cawnpore must be an eye-opener to the town-planner and the health superviser, no less than to the Government itself. Strong measures are needed to wipe out the evil. A wholesale clearance of insanitary and over-croweded slums preceded by proper suburb-planning for industrial workers, alone can mitigate the present animal lives of the labourers.

The effects of congestion on infant mortality are the same everywhere. In London and Glasgow for insance the more congested and comparatively less developed boroughs show considerably higher mortality amog the infants than those which have been properly surveyed and cleared up.

The following table indicates the infant mortality rate in some of the important boroughs of the County of London in 1921 * *and in wards of Birmingham in 1922* **

Metropolita boroughs of London.	Infant mortality rate	Wards of Birmingham.	Infant mortality rate.
Shore-ditch	111	Central ward	105
Kensington	107	Market Hall	117
City of London	106	Middle Ring	77
Bethnal Green	100	Outer Ring	61
Paddington	91	Harborne	42
Holborn	79		
Battersea	74		
Hampstead	66		
Woolwich	62		
Lewisham	56		
Stoke Newingtown	54		
Total County of London	81		

* Report of the London County Council on Public Health for 1922.

** The New Leader—London dated 2nd March 1923.

It will however be clear from a comparison of the above figures with those of the Indian cities given above that the infant mortality rate in the worst wards of Glasgow is almost insignificant as compared to the best quarters in many of the Indian Cities.

Coming directly to the subject of the relation of house accommodation to child mortality, it is interesting to note that the frequency of infantile deaths varies inversely with the number of rooms occupied. A few examples will illustrate the point.

Infant Mortality according to number of rooms in Bombay in 1921 and 1922.

Class of tenements by number of rooms.	Average No. per room.	Percentage of class of tenements to total	Infant per 100	mortality births.
			1921	1922
1 room ..	4.03	70	828.5	470.9
2 rooms ..	2.11	14	321.9	435·7
3 rooms ..	1.60	7	191.4	421.6
4 rooms and over ..	1·30	9	133·3	300.3
Road side ..	..	..	484.8	386.3
Hospitals ..	..	..	189.6	150.5

The table is significant of the close relation that house-room bears to infant welfare. The more the congestion the higher the mortality and *vice versa*. Not only this but it has been found over and again on examination that children who survive in these overcrowded conditions grow pale and sickly and have none of the vigour of youth. It has been estimated that boys living in singleroom houses lose about 3 inches in height and over 11 lbs. in weight as compared to those living in four-room houses.

We must point out in conclusion that our treatment of child mortality as being directly connected with house-accomodation is not really at variance with the general belief which associates high infant mortality with poverty, ignorance and mal-nutrition. For poverty and ignorance themselves encourage overcrowding and insanitation. Dirt and overcrowding again bring about mental depression and impaired metabolism which in turn react upon health and lead to impaired efficiency, unemployment and poverty. All this leads not only to a physical waste in energy and general enervation, but also to low standard of health and low resisting power which play directly into the hands of immorality and disease. Thus the vicious circle continues. More often than not intoxication, and other evils add to the irresistible strength and sweep off the vicious circle and aggravate the effects of poverty and overcrowding.

[We publish this paper because the facts it presents need to be made public. Its value would be far higher were figures for congestion or density of population given for comparison with those of infant mortality. The figures showing the proportion of infant deaths under 6 months do not prove the point, for the proportion is higher for the provinces than in the cities. Ed.]

ECONOMIC RESEARCH INSTITUTES IN THE UNITED STATES.

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INTRODUCTION.

The great need of economic research in India is today receiving more and more recognition. In Bombay Presidency the Labour Office is investigating economic phenomena of interest to labour and to industry, and the passage of the Collection of Statistics Act will make their task easier and their accomplishments greater. In the Punjab a Board of Economic Inquiry has been organised and has already begun important investigations (1) The Taxation Inquiry Committee recently appointed by the Government of India have begun their labours, and the Imperial Government has asked the Provincial Governments for opinions regarding a general investigation into economic conditions and the standard of living.

Notwithstanding these evidences of interest in the marshalling and publication of economic facts, and of decided steps in that direction, there is frequently much misunderstanding as to the methods which should be adopted in such investigations. The resolution introduced into the Council of State some months ago asking for a far-reaching investigation into the standard of living of the Indian people called especially for a study of the average income per capita. It was apparently not realized that such a conclusion, though accurately determined, would of itself have little value, for it would tell nothing about the distribution of income among the various classes of the population and would throw little light on the much disputed question as to the whether India is growing poorer or richer. There is also evident much confusion as to the proper sphere of Government action in relation to economic research.

It seems to the writer that we need at least four methods of economic statistical research. First, there is needed the collection and publication of current statistics of many sorts by Provincial and

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1 See the article by W. H. Myles in this issue.

Imperial Government agencies and semi-official bodies (such as the Imperial Bank and the Punjab Board of Economic Inquiry.) The work of the Department of Statistics and of the Labour Office at present cover only a small part of the ground that should be covered by such bodies. Second, the collection of statistics, the checking of the accuracy of officially collected statistics, the interpretation of existing statistics and special studies of various sorts by economic research organisations. These, we believe, should generally be privately endowed or supported by the public, rather than by Government, third, the collection, publication and interpretation of statistics relating to specific lines of industry or trade by permanent organisations connected with the industry or trade, such as the Bombay Millowners' Association and Stock Exchanges. Fourth, studies by individual investigators and economists.

It is with the second of these that this article deals. There is not, so far as the writer is aware, a single institution of this sort in India, and the need therefor cannot be too strongly stressed. The present article, describing several research institutions in the United States, is presented to the readers of the *Indian Journal* of *Economics* with the idea of arousing interest in the need of such an organisation in India and an appreciation of the services which such an organisation might render to the country.

Among a number of endowed and publicly supported institutions in the United States which are actively carrying on or aiding economic research of various sorts, the following are perhaps the most prominent ; (1) the National Bureau of Economic Research, located at New York City, (2) the Institute of Economics, at Washington, (3) the Pollak Foundation for Economic Research, and (4) the Harvard University Committee on Economic Research and the Harvard Economic service. Along with these we may mention several University bureaus of business research, notably those of the University of Illinois, of New York University, of Northwestern University (Evanston, Ill.) and of Harvard University.

THE NATIONAL BUREAU OF ECONOMIC RESEARCH.

Among these, the National Bureau of Economic Research is possibly the best planned and organized for the purpose of elaborate statistical investigations, though the Institute of Economics is very similar in scope and purpose. The National Bureau of Research was formed in 1920 by a group of economic statisticians and business men with the aim of undertaking investigations which could only be done by a trained and adequate staff. It is controlled by a board of 19 directors, known as Editors-at-large, partly economists, partly public men and partly industrialists and financiers, and every publication of the Bureau is submitted to each member of this committee, who has the privilege of adding comments or notes of dissent. Labour Unions, Farmers, Bankers, and Engineers, are represented among the Directors, and thus any possible bias is corrected by all shades of opinion the actual work of the Bureau is done by a staff which consists of a nucleus of five or six highly qualified investigators surrounded by a clerical staff built up with the idea of enabling these men to develop their highest efficiency. This clerical staff consists of statistical clerks, computers and compilers of varying degrees of training, and of clerks and stenographers. Besides these, men are sometimes temporarily employed for special work, these being men specially qualified for a particular problem being studied. Nor are these men burdened with problems of organisation and routine, as there is a Director of Research who acts in an advisory and administrative capacity and an Executive Secretary to take care of routine administrative work.

The first problem attacked by the national Bureau of Economic Research was that of the distribution of income in the United States. This investigation was conducted by Wesley C. Mitchell, Willford I. King, Frederick R. Macauley and Oswald W. Knauth and the results published in two volumes entitled "Income in the United States,' the first being a short summary for the general public and the second a larger volume giving the data and explaining the methods used, intended for economists, statisticians and students When, in 1921, the conference called by the President of the United States met to discuss the unemployment problem, it was confronted by a lack of data and actual facts regarding the extent and causes of unemployment, and as a result a Committee on Unemployment, and Business Cycles was appointed by the Secretary of the Department of Commerce. For this Committee the National Bureau of Economic Research made an exhaustive investigation under the direction of

Wesley C. Mitchell and with the co-operation of a number of prominent national organisations. The results of this investigation, together with report and recommendations of the committee were published in 1923 in a volume entitled "Business Cycles and Unemployment." The writer understands that, among other investigations the Bureau is now making a still more exhaustive study of business fluctuations under the direction of Dr. Mitchell, who is one of the foremost investigators along this line of economic study.

THE INSTITUTE OF ECONOMICS.

The Institute of Economics, founded a few years ago by the Carnegie Corporation of New York, has issued the following statement of its scope and purpose

> The Carnegie Corporation of New York in establishing the Institute of Economics declared that "in committing to the Trustees the administration of the endowment of the Institute of Economics, over which the Corporation will have no control whatsoever, it has in mind a single purpose—namely, that the Institute shall be conducted with the sole object of ascertaining the facts about current economic problems and of interpreting these facts for the people of the United States in the most simple and understandable form. The Institute shall be administered by its trustees without regard to the special interests of any group in the body politic, whether political, social or economic." In order that the council and staff of the Institute may enjoy the freedom which is conceded as essential to scientific progress, the Trustees of the Institute have adopted the following resolution: "The primary function of the Trustees is not to express their views upon scientific investigations conducted by the Institute, but only to make it possible for such scientific work to be done under the most favorable auspices."

The organisation of the Institute of Economics, though somewhat different, is essentially similar to that of the National Bureau of Economic Research, as it has a set of officers (president), vice-president, treasurer and director, a board of trustees, and a council of four members, as well as a staff of investigators, statisticians and clerks. The Director and members of the Council correspond in many respects to the superior staff of the National Bureau of Economic Research. In method and purpose these two institutions seem to be very much alike, though the Institute of Economics perhaps tends more toward the idea of the popularization of economic knowledge. The Institute of Economics has published a larger number and wider range of books than the National Bureau of Economic Research and is now engaged in several series of investigations, but so far none of its studies has been as extensive and exhaustive as those of the National Bureau. The scope of the work of the Institute can best be judged from the following list of past and forthcoming publications.

Investigations in international economic reconstruction:
"Germany's Capacity to Pay" (published 1922).
"Russian Debts and Russian Reconstruction" (published May 1924).
"The French International Debt Situation."
"Italy's Foreign Debt Problem."
"Economic Consequences of Inflation and Deflation in Europe."

Investigations in international commercial policies:
"American Methods of Tariff Making."
"Sugar in Relation to the Tariff" (published March 1924).
"The Wool Duties."
"The Tariff and the Cattle Industry."
"The Tariff and Cotton Growing."
"The Tariff and Wheat Farming."

Investigations in industry and labor:
"Miners' Wages and the Cost of Coal" (published April 1924).
"Industrial Relations in the Coal Industry."
"Industrial Budgeting—a Study of Forward Planning in Industry."
"Corporate Earnings in the United States."

Investigations in agricultural economics:
"American Agriculture and the European Market" (published June 1924).
"Marketing Methods and Grain Prices."
"The Farmer's Position in the Financial System."

The fact that the Institute of Economics is well endowed makes it possible to publish its works at less than cost price, if it deems this desirable though as a matter of fact these books are listed at regular prices, but in some cases at least, free copies have been liberally distributed.

THE POLLAK FOUNDATION FOR ECONOMIC RESEARCH.

> The Pollak Foundation for Economic Research is privately endowed for the purpose of studying the means whereby the economic activities of the world may be so directed, and the products so distributed, as to yield to the people generally the largest possible satisfactions. Orders for any book in this list may be sent to the Pollak Foundation, Newton 58, Massachusetts... They are priced, in general, with a view to covering the cost of printing, all other expenses are from the endowment funds of the Pollak Foundation.

Thus runs the statement on the leaflet published by the Pollak Foundation describing their publications. This foundation differs from the National Bureau of Economic Research and the Institute of Economics in that it has only a very small staff giving all or most of their time to the work of the Foundation. The work of the Pollak Foundation consists mainly of (1) financing investigations which are being conducted by economists in their universities or elsewhere, (2) financing the publication of the results of such studies and of other works which ordinary publishers might not find profitable, and (3) the awarding of occasional prizes for the best essays on specified economic topics.

Most of the publications of this Foundation to date have been closely allied to the problem of business fluctuations, as the following list will indicate :

" The Making of Index Numbers," by Irving Fisher.
" Money," by William Trufant Foster and Waddill Catchings.
" Costs and Profits," by Hudson Bridge Hastings.
" Cycles of Unemployment," by William Arthur Berridge.
" The Problem of Business Forecasting," by Warren M. Persons and others.
" Social Consequences of Business Cycles," by Maurice B. Hexter.
" Profits," by William Trufant Foster and Waddill Catchings.
" Bank Credit and Business Cycles," by O. M. W. Sprague.

THE HARVARD ECONOMIC SERVICE.

A research organisation of quite a different type than the preceding is the Harvard University Committee on Economic Research and its Harvard Economic Service. This Committee consists (1) of a chairman, who is one of the professors of the University, and six members, and (2) a superior staff of four members (an editor of the " Review of Economic Statistics," an editor of the " Harvard Economic Service," an economist, and a general manager) assisted by the necessary subordinate staff of investigators, computers, statisticians and clerks. This economic service is devoted to the interpretation of current business statistics and to the forecasting of the general trend of business conditions. Here again we can describe the purpose, scope and nature of the service in no better way than by quoting from a recently published leaflet addressed to executives and business men.

> Every day in the business life of your organisation you are required to make decisions involving an accurate knowledge of future business conditions—decisions which are certain to have an important bearing on what your concern will make or lose six months or a year later...
>
> Perhaps right now your are considering the purchase of a large supply of raw materials, the extension of you present plant equipment, an increase in your advertising and sales appropriation, or the more liberal extension of customers credit

and possibly you are trying to decide in your own mind how much longer prices and business activity will continue at their present levels.

You can scarcely afford to make commitments involving large expenditures, without all the available facts before you. You must be able to recognize and interpret the economic signals which invariably precede, and hence forecast, major movements in prices and general market conditions, in order to protect the resources of your organisation against the damaging effect of unforeseen changes in business conditions...

This is exactly where the Harvard Economic Service can help you... This service is not offered to you as an experiment. It has been in practical operation since the close of the war and is backed by a series of successful forecasts which merit your closest analysis as an executive.

The business predictions of the Harvard Economic Service are based upon a system of economic forecasting which has stood up under rigid scientific and practical tests. Two years before its release to the public was considered, this system was applied against the pre-war period, 1903-14, to determine its value for commercial purposes. It is a notworthy fact that throughout the entire eleven years it forecast every important turn in business from six to ten months in advance of its occurrence...

The successful performance of this system over the pre-war period suggested such unusual possibilities for commercial use that a forecasting service, based upon the methods developed, was established in 1919 in the interest of American business. Its forecasting record during these five years of extreme business uncertainty is impressive.

In December 1919, when many business men apparently believed that flush times would continue for years to come the Harvard system of business forecasting gave unmistakable warning that an industrial depression would occur by the middle of 1920. Liquidation actually began in April in those industries that were in the weakest position, and by summer the depression had become general.

In the summer of 1921, when the business public evidently looked for another year of depression, the system clearly forecast that a period of business recovery and a rise in wholesale commodity prices would begin in the early months of 1922. This forecast, like the previous one, has been amply borne out by actual market conditions...

The Harvard Economic Service is an experiment by an educational institution in the application of economic science to American business management, which has proved successful over the five worst years in recent experience. It is not maintained for private gain but for the promotion of economic research in its relation to business problems of immediate practical concern...

As a subscriber[2] you will receive (1) a *Weekly Letter* on the general economic situation (two letters a month deal with general business and financial conditions and indeed a forecast, based upon the Index chart, of the probable future course of wholesale commodity prices and industrial activity. The other letters cover every important phase of the current economic situation and deal separately with such subjects as wholesale commodity prices, the volume of manufacture, industrial employment, foreign trade, the money market, international banking conditions, the European economic situation, and security issues.) (2) *The Quarterly Review of Economic Statistics* which presents extensive economic surveys of especial importance to business men interested in the basic factors that control the course of business conditions, and (3) special statistical *supplements* which contain the complete figures for international commodity prices, production, trade, and banking. These supplements provide subscribers with the statistical data on which the service is based.

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[2] The regular subscription price of the service is § 100. The *Quarterly Review of Economic Scatistics*, without the Weekly Letter, is furnished to economists and libraries at a reduced rate.

The financing of the Harvard Economic Service is unlike that of the research organisations described above, as it is not endowed. While the University has financed the undertaking at its beginning, the Service is expected to pay its way and in time to refund the sums advanced by the University.

UNIVERSITY BUREAUS of BUSINESS RESEARCH.

Several Universities in the United States have established bureaus of business research. Among the most prominent of these are the Harvard Bureau of Business Research (to be distinguished from the Harvard University Committee on Economic Research and the Harvard Economic Service), the New York University Bureau of Business Research, the Northwestern University Bureau of Business Research and the University of Illinois Bureau of Business Research. The first three of these have devoted attention particularly to problems of marketing, a phase of economic life which in the past has hardly been touched by economists. "The university bureau of business research has been called into existence in an attempt to discover the laws of business, and to that end it is busy accumulating business data and classifying such data so as to trace relations between cause and effect."[3]

The development of accounting systems which will adequately show the relation of various lines of cost in merchandizing has been the chief accomplishment of the Harvard Bureau of Business Research. So far this Bureau has worked out careful accounting systems for wholesale and retail grocers and shoe dealers, and for retail jewelry stores. The Bureau's standard accounting system has been adopted by a large number of grocers, who feel that it is a great improvement over former methods.

(3) Lewis H. Haney, *Putting Science into Business, p. 4.*

Of similar import are the surveys of the retail clothing business (made for the Retail Clothers' Association) and of the book and job printing industry made by the Northwestern University Bureau of Business Research. These surveys are analyses of expense and afford valuable standards of comparison for retail clothing merchants and printers.

Along the same line of detailed study of marketing is the trade barometer for wholesale grocers worked out and published by the New York University Bureau of Business Research. This trade barometer shows the average daily sales in each month in the wholesale grocery business throughout the state of New York, changes in wholesale grocery prices, changes in consumers purchasing power, the physical turnover of goods, and includes a chart showing the general trend of the grocery business and a forecast for the following month.

The director of the New York University Bureau of Business Research has stated the significance of such studies as these in the following words:

> Each industry has its own peculiarities which must be carefully studied to get the basis for forecasts that will be accurate for it. "New building" may have little significance for the oil industry, and crop conditions may not concern copper producers. To make a fundamental forecast for the copper industry would be much simpler than for the petroleum industry , because the latter depends on the sale of a group of joint products, partly to industries and partly to consumers, and on the supply side it is more uncertain as to cost and output. The way to proceed is to find out where the demand lies and get the data that indicate its trend to get the supply data, including cost and to ascertain turnover or physical volume upon the margin between cost and price. On the turnover depends the profit; and it is profit that interests the business man.
>
> Demand and supply determine price under competition, and it is only by forecasting these forces that prices can be forecast. Profit depends on the margin between cost and price, consequently when price has been forecast, the chief variable items of cost must be forecast if the future earnings are to be predicted. On the basis of these factors independent numbers could be computed that would accurately show the trend of the business and forecast the immediate future. Such an indicator and forecast would be accurate because *based causal on conditions*..
>
> The possiblity of developing such analysis is without limit, and in the writer's judgment holds out the greatest hope that business may become less of an art and more of a science.

(4) Lewis H. Haney, *Putting Science into Business, p. 7*

The work of the University of Illinois Bureau of Business Research has been somewhat different, their publications being Bulletins on the following topics: Illinois State Taxes in 1921, Illinois State Revenue 1895-1920, the tax rates of Illinois cities in 1921, methods of training employees in stores of moderate size, books about shoes, and books about books. The following quotation from the catalog of the University of Illinois explains well the purpose of the bureau and something of its methods.

> Granting that business can never become a science akin to physics, chemistry, or biology, because it deals largely with men rather than with unchanging natural phenomena, yet it seems possible that business might become more and more scientific in its methods. In order to speed the day when this may be achieved, business research has the task of ascertaining more facts concerning all that occurs in business, of analysing, sifting, coordinating the factors underlying sound business practices, and of making the findings available.
>
> The Bureau of Business Research was established in 1920, for the following specific purposes: (1) to study and as far as possible to explain economic and industrial conditions within the state; (2) to direct attention to experience-tested practices of good business management; and, (3) to investigate methods for securing the best executive control of business.
>
> The Bureau is carried on the University budget as a department of the College of Commerce and research work is never undertaken for individuals for a fee. It is primarily a service organization, having about the same relationship to business men as an agricultural experiment station has to farmers. Because business cannot be studied in a laboratory like many of the physical problems of agriculture, the work of the Bureau depends very largely for its data for study upon cooperation from the business men and its method must necessarily be largely analysis. Much of the data examined in the Bureau is highly confidential and every precaution is taken to conceal the identity of the individuals cooperating, and to publish only averages or group figures which are typical yet do not reflect any single enterprise.

The foregoing is sufficient to indicate the scope of the University bureaus of business research. A word may be added concerning the organisation and methods of one of them. The New York University Bureau of Business Research is composed of a Director, three Assistants to the Director, a group of ten consulting experts (on merchandising, plant management, foreign trade, statistics, salesmanship, business management, finance, advertising and marketing, accounting, and industrial engineering) and a staff of research workers. The heads and staffs of the University departments of commerce, accounts, finance and engineering also cooperate with and assist the Bureau. This bureau not only makes studies of general interest but also undertakes special problems in research for trade organisations and individuals, charging for this service on the basis of cost.

It is obvious that the success of these bureaus in studying business problems, especially marketing problems, is made possible only by the fact that they have had the confidence and cooperation of retail and wholesale traders. Most of these studies are based upon reports submitted by dealers regarding their own businesses. Naturally the dealers will submit this information only when they believe it is held strictly confidential and will not be disclosed. The work of these bureaus is so organized that this is accomplished. In most cases, for example, the reports are opened by an official of the Bureau, and no firm's name, but only a number, appears on the report as it is handled by the clerical staff. Each firm thus discloses no private information to competitors, and gains the great advantage of knowing what is going on in the industry in general.

CONCLUSION.

These various research agencies are accomplishing great things in the analysis of economic and business phenomena in the United States. Several in number and varying in type, there seems to be ample room for all they can accomplish. Modern research is for too complicated a task for individuals to perform, and can be adequately done only by these large bureaus, either endowed or supported by public institutions. The work must be organized so that reports of individuals and firms are kept strictly confidential. The bureau needs to be well financed, so that no expense need be spared in making investigations as accurate and detailed as possible. A staff of several well-qualified, highly trained men is required, aided by a much larger staff of assistants of varying degrees of training. Finally, the bureau needs to be a permanent organisation, for in no other way can the requisite qualified staff be built up and retained. A permanent organisation is also able to deal with several problems simulnateously and successively.

The writer believes that the time is ripe for the establishment of such a bureau in India, and that a research organisation of this sort could investigate with more throughness than individual professors of economics, and with a greater freedom than committees appointed by Government, many of the economic problems of the country.

"THE PLACE OF ECONOMICS IN THE EDUCATIONAL CURRICULUM."

R. M. Joshi

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Any well thought out scheme of education ought to have both a cultural and a practical aim. The cultural aim may briefly be defined as broadening the outlook and refining the tastes of the individual. The practical aim ought to be to train the future citizens of the country to citizenship, to train them to earn their living and to train them to use their leisure worthily.

Education ought to be carried on at least up to the end of the secondary stage in order that a young person may just be set on his feet in both these respects. If further education is impossible on pecuniary grounds, a scheme of University Extension lectures may partly fill the need. But the point is that unless education creates in a person a desire to take an intelligent interest in the things going on around him, it has failed of its main purpose ; and not only University education but even secondary education may reasonably be expected to lead up to that result. Does that happen in India ? If not, we must seriously consider why ?

The Calcutta University Commission of 1917-19 studied the educational system not only of Calcutta or Bengal but of the whole of India and its report is admitted to have an All-India application The Commission pointed out a mumber of evils lurking in the educational system of the country. They agreed that one of the chief causes of unrest in the student community was the fermentation of new political and social ideals. They felt that "the deficiency of the historical studies in the University system of Bengal was *a real danger.*" (Italics mine.) And what was true of Bengal was equally true of other Universities. In fact in Bombay, the historical studies, which for years had been a compulsory part of the work for the B.A. degree were in 1910-11 removed in spite of strong opposition on the part of the late Mr. Gokhale, from the compulsory to the optional group of subjects. The Commission pointed out the necessity of training the students "to examine difficult issues of politics and economics with just discrimination, to accustom them to thoroughness of critical examination, to give them a distaste for shallow rhetoric and to furnish them with the materials for a sober and independent judgment." After such a shrewd analysis of the causes of trouble in the student world and such a clear announcement of the aims to be achieved, one would naturally expect the course of studies sketched by the Comission itself by way of illustration to be so framed as to avoid the old defects and lead up to the new aims. But there one is sorely disappointed. In the so-called Intermediate Course proposed by the Commission—which is really what ought to be the top portion of the High School or Secondary Course—a student looking forward to an arts degree is to get some knowledge of history, "if it be at all possible." He is also to have, "if it be at all possible," "a discipline in at least one of the 'reasoning' subjects—logic, economics, or mathe matics." After taking such an Intermediate course, the student desiring an Arts degree is to take up either History or Economics as his special subject. It is astonishing that a Commission which set out to equip the students in general with a reliable rudder with which to guide the course of their ship of life in the midst of the political and social ferment, a Commission which wanted students in general to possess "materials for a sober and independent judgment" on "the difficult issues of politics and economics "of their day, should have recommended such a halting and hopelessly threadbare course of studies to achieve their purpose. It is equally astonishing to find a Commission stating in one place that the outstanding issues of the day which disturbed the equanimity of the students' mind were the issues of politics and economics, and in another place opining that Economics is merely a 'reasoning' subject to be taught for the sake of 'disciplining' the mind, as an alternative to Logic or Mathematics. In short, the Commission read the situation quite correctly though they failed very badly in suggesting the remedy.

Our educational curriculum ought to be so framed that every student taking a regular course of studies, at least until he reaches the years of discretion, if not later, should receive among other things an adequate training in the elements of citizenship. He must become able to understand a discussion of "the difficult issues of politics and economics" though he may not be expected at that stage to have his own opinions on such issues. This means that the elements of Politics and Economics ought to form a part—a compulsory part,—of a scheme of good general Secondary education. A training in the 'reasoning' subjects like Logic or Mathematics is also necessary. I should rather say Logic *and* Mathematics and make Logic, both deductive and inductive, of course only in outline, take the place of Mathematics in the final year of the Secondary course. I expect students to be of the age of 17 or 18 when learning the Elements of Logic, Politics, and Economics, and I expect students of that age to be able to understand the elements if they are explained to them in simple language with the help of illustrations from every-day life.

Speaking of Economics in particular, if the teacher knows his subject, he can dispense with the text-book altogether for the purpose of his lecture, leave the learned jargon of academic discussions, diagrams, curves, mathematical formulae and all the rest of it for a later stage of study and aim merely at opening the eyes of his students to a common sense explanation of the economic activities going on around them and draw out the fundamental principles underlying those activities as he goes along as it were. Making the lecture a sort of annotation on a particular text-book is, of course, the surest way to failure in this respect. The more independent one is of the text-book, the greater the chance of success. Let the student try and follow the lecture, take his own notes of it, go about and observe things with the 'economic' eye he is being helped to develop, and then to make his ideas more definite read from any of the simpler books on the subject the portions bearing on the topics dealt with in the lectures, ignoring all the rest for the present. Elements of Economics thus conveyed will become a very live subject in the mind of the student and he may, if he is particularly drawn to it, take up the subject for special study for his degree. In that special course there would be room for some of those hair-splitting discussions of what is called pure theory, but I should not over emphasize them even in that course. I would rather expect a more detailed study than was possible in the elementary course of those portions of Economics which have become special subjects by themselves e. g. Currency and Banking, Organisation of internal and external Trade, Railway and Shipping Transport, Public Finance, Statistics, etc. I should also include in this course an outline of the economic development, particularly during the 19th century, of some of the leading countries of the world especially those which have made deliberate successful efforts at economic regeneration or modernisation, e. g. Italy, Japan, Canada, or Germany. It would also be useful to stress the importance of comparative study in this subject of Economic History. I would, for instance, make the student compare, with the help of historical records, the economic condition of India under Akbar with that of England under Elizabeth, or of India in the 18th century with that of the continent of Europe in the same century. That should be an extremely valuable training for a specialist student of Economics. Then I should expect from such a student at least a broad acquaintance with the issues involved in the important economic problems of the country to-day *e.g.* the Currency and Exchange problem, the running of the national Railways, the Banking facilities in the country, the subdivision and fragmentation of holdings, Finance—Central, Provincial and Local—Land Revenue and Land Tenure etc. I should not bother much about the history of economic theory any more than about some of those learned-looking, never-ending discussions of so-called ‘ pure ’ theory.

In short, I want a young man with an economics degree to know the broad principles of economic theory in general as well as the theory involved in what are now known as the special branches of Economics. I want him to have in his mind a broad outline of the picture of economic development, especially in the last and the present century, of his own and of some of the other leading countries of the world. I want him also to know the general nature of the particular economic problems, facing the country to-day. Such a student should be able to undertake the investigation in greater detail of any particular problem in the wide economic field of which he has taken a general survey. Two years' systematic work on such a problem in a well-equipped library—which, also, is such a very rare institution in this country—should result in the production of a thesis which, if not an original contribution on the subject, would at any rate be a useful compilation and prove the capacity of the writer for a systematic, intelligent and critical handling of a particular economic problem. Such a thesis should suffice for a master's degree in Economics and the holder of that degree would safely be entrusted with the teaching of the Elements of Economics and would in time be qualified to do higher teaching and to guide research work. A doctor's degree should be reserved for a genuinely original contribution, a real addition of a valuable character to the sum of knowledge in a particular field of economics.

In the foregoing few lines I have attempted definitely to mark out the various stages in the study of Economics and the place of each in the educational curriculum. If my scheme were adopted I believe we would have a much wider diffusion of economic knowledge than we have at present, a much larger number of people with well-grounded opinions on the various economic problems of the country and a much better provision for the creation of useful economic literature. I may be told that I expect too much particularly at the end of the Secondary stage of education even though my expectations at the B. A. and the M. A. stages may not be put down as too high. My answer is that the level of our Secondary education in this as in many other respects needs definitely to be raised if our Universities are to do proper University work, if our graduates are rightfully to claim equality wtth those of the best Universities of Europe and America. A very great deal more work could be done in our Secondary schools than is done at present if, firstly, we gave up our idiotic attempt to teach all manner of subjects through a foreign medium of instruction, and, secondly, if the headmasters and teachers of our Secondary schools thought primarily of educating the boys and not of cramming them up for examinations. The mere creation of Intermediate colleges will not solve the problem. They cannot do in two years what has been left undone or badly done in the preceding five. These so-called colleges will only charge collegiate fees for doing high school work and do it badly because of their unwieldy numbers. What must be done in the high school must be done there. It cannot be done at a later stage ; it ought not to be postponed to the later stage. We must give value for money at all stages of education. We must fix our values, our stages, first and insist on the necessary money to take the student up to the particular stage But let us not send out B. A.s into the world who would not be regarded as much superior to matriculates by the leading

Universities of other countries. If we fix the level which Secondary education must lead up to, with all these things in our mind, there will be room for more subjects, for more general knowledge, for the outlines of economics among other things. They are trying it in England, we can also try.

REVIEWS OF BOOKS
RELATING TO INDIA.

Protection for Indian Steel. By E. H. Solomon, B. A. Calcutta: University Press. 1924. Pp. xiv. 106.

At this stage in the history of Protection for Indian steel, when the Tariff Board have decided on a particular line of action and that too after wading through a huge volume of evidence directly or indirectly relevant to the question—it would, at first sight, appear that the author was "inflicting this, his first book" on the reading public. True there is not much in the book that has not already been discussed, and discussed well, either by the Fiscal Commission or by the Tariff Board. But the subject is of such great importance that it can bear repetition, specially if that repetition happens to take such a scientific, and well reasoned shape, as this first attempt of Mr. Solomon. In Chapter I entitled Introductory the usual theoretical ground is covered, and a brief history of the Tariff Commission, the Tariff Board and their labour is given. In Chapter II the figures of steel consumption and production in India are given, and after studying them in close relation to imports, the author has come to the conclusion that, "whereas there is undoubtedly large scope for the expansion of steel manufacture in India.... but in view of India's comparatively limited consumption and in view of possible developments from a policy of substantial protection, great care will have to be taken to see that there is no waste of the capital resources of the country, in an indiscriminate multiplication of companies for steel manufacture. Some control must be exercised through the Tariff Board, if protection is given, to see that companies benefitting thereby, produce the requisite quantities of goods required by the country, and do not merely over-produce in certain branches of the industry already established in the country."

Capter III gives the ' History of Tata Iron and Steel Co., Lt.," and Chapter IV takes up the question "Is Protection Necessary ?." We are in perfect agreement with the conclusion of the author that "the foregoing discussion leads to the conclusion that none of the canons of the Fiscal Commission disqualifies the steel industry from protection, if one inclines to the view that its development" in India requires to be accelerated, in view of its being a 'basic' industry. But the chapter covers ground already covered by the Tariff Board, and has not added one iota of fresh information, or even a new point of view, to our knowledge of the subject. Here however, ends our unpleasant duty, and we come to chapter V where the important question whether "High" or "Marginal" Protection should be given is very ably discussed. "High Protection" is that, "which would prefer the grant of a substantial measure of help guaranteed for a fairly continuous period, with the object of encouraging the entry of new capital into the field." "The Marginal Protection favours the grant of just that amount of assistance, without which, having regard to all the circumstances of production, it would not be possible for the capital already engaged in the industry and any contemplating entry into it, to obtain the minimum necessary for continuance in the industry."

The author is definitely in favour of marginal protection, and the reasoning that leads him to this conclussion based as it is on facts and figures of the Tatas and other steel interests in India is most convincing. Naturally in Chapter VI he passes on "to determine the extent of protection necessary, under a policy of marginal protection." After taking into consideration the estimates of comparative costs in India and foreign countries, he recommends a state of preferential tariff—preference, of course, being in favour of England as against other countries. "In this factor, lies India's opportunity if she is effectively to protect herself against foreign competition, to do so while yet granting a measure of preference to British steel which would go far in some quarters to remove the belief in the existence of a deep-rooted anti-British bias in the Indian mind." In Chapters VII and VIII the extent and methods of the preferential scheme are delineated, and some supplementary measures are also given. Here again, we note with pleasure, the argument is supported by figures, and the proposals arrived at after due deliberation on the various aspects of the case.

On page 9, in columns 2, 3, and 4 we should have tons instead of rupees.

B. G. BHATNAGER.

Report on an Enquiry into Agricultural Wages in the Bombay Presidency. BY G. FINDLAY SHIRRAS. Published by the Government of Bombay Price: Rs. 2 as. 9.

The object of the above publication is to give an idea of "the annual changes in agricultural wages throughout the Bombay Presidency including Sind from 1900 to the present time, especially from the pre-war year 1913." The results given are the outcome of a very exhaustive enquiry undertaken by the Bombay Labour Office. The statistics District by District, Division by Division, and also according to homegeneous economic circles—namely Sind, Gujarat, the Deccan, and the Konkan were collected for three wellknown groups of labour which are—(1) field labour, (2) ordinary labour, and (3) skilled labour.

The figures recorded as the wages paid to field labourers "are the predominant cash wages for casual labour in the neighbourhood of a centre where the figures are taken, and do not represent the earnings of the permanent farm hands who are paid partly in cash and partly in kind;.. but in most cases cash wages are replacing wages in kind in this Presidency." "The ordinary labourer is migrating now from village to village and from town to town owing to increased communication, and is selling his labour in the market where there is a demand for it. In rural areas the ordinary labourer is paid more than the agricultural labourer. The rates of wages earned do not show any marked variations between the urban and rural areas in districts of small importance, but this is not so in the advanced industrial districts of Ahmedabad, Sholapur, *etc*." Skilled labour has also secured a substantial increase over the wages of 1900 and 1913. One fact is noticeable about the wages of all the three classes, that higher rates prevail in Sind as compared with other parts of the Presidency. Figures for all the different kinds of labour, with the percentage changes in 1913 over 1900, and in 1923, over 1900 and 1913 are given, and these are further illustrated by beautiful curves.

In Section V the movement in real wages is examined. Here no attempt has been made to give the real wages of each class, but a real wage index number, for each class and for each period is given. This has been calculated by multiplying the money wage index number by 100, and then dividing the multiplicand by the cost of living index number. "The cost of living index for the presidency was arrived at by taking the price of food articles district by district and division by division. Fuel and lighting consists in this case of Kerosine oil, since the agricultural labourer ..obtains his fuel at little expense......The prices are in all cases district prices, except those for clothing, which are those in Bombay."

The main features of the tables of real wage index numbers are (a) "over long periods, *i. e.*, as compared with 1900 real wages have risen, and (b) in short periods real wages have risen except in the case of field or ordinary labour in rural areas. Here again all these facts are illustrated by curves. Perhaps the one thing that would have made the study a little more interesting would have been a chart with curves of real and nominal wages in the same perspective.

Besides this valuable information the Report contains a wealth of other useful information on the Hours of Labour, the Size of Holdings, *etc*., and we recommend it very strongly to all students of Indian Economic Conditions in the rural areas.

B. G. B.

REVIEWS OF BOOKS.

ENGLISH & FOREIGNS.

The Problem of Business Forecasting. Edited By WARREN M. PERSONS, WILLIAM TRUFANT FOSTER and ALBERT J. HETTINGER, JR. Boston and New York: Houghton Mifflin Company, 1924. pp. 317, Price; 4 dollars.

This collection of twenty-one papers by American statisticians, economists and industrialists might well have been reviewed in the October issue of the *Indian Journal of Economics* along with others related to the business cycle, for they are attempts to sum up, in so far as the United States is concerned, present knowledge concerning the fluctuations to which business is subject, and to state the results so far achieved in forecasting future fluctuations. The book is a discussion, as Mr. Persons says in the first chapter of "the statistical basis for analyzing the current economic situation, with the object of making forecasts of business conditions in general and for the great groups of economic activities in the United States."

In the first chapter on "The Problem of Business Forecasting," Mr. Persons calls attention to what he believes to be a frequent mistake among economic statisticians. This is in regard to the theory of probalility in relation to economic phenomena. "The view that the mathematical theory of probalility provides a method of statistical induction or aids in the specific problem of forecasting economic conditions, I believe, is wholly untenable" (p. 8). "When we say that the conclusions of the social scientist are expressed in terms of probalilities we mean merely that his conclusions do not have the certainty of those of the natural scientist. The probalilities of the economic statistician are not the numerical probalilities which arise from the application of the theorems of Bernoulli and Bayes; they are, rather, non-numerical statements of the conclusions of inductive arguments." (p. 12).

Succeeding chapters by such eminent investigators as Willford I. King, W. Randolph Burgess, Irving Fisher, David Friday, L. H. D. Weld, G. F. Warren and nearly a score of other men deal with the collection and use of statistics and their value in the forecasting of conditions in special lines of economic endeavor, such as railway traffic, building construction, motor car production, mineral production, and agricultural crops, conditions, and prices. The book closes with "An Example of Business Forecasting" by Charles O. Hardy. Each chapter is written with care and with a critical evaluation of present statistics and statistical methods. Many of the writers stress the need of more and more statistics and greater reliability in some of those already collected, and this in spite of the fact that the United States already has far more elaborate statistics of banking, production, prices, and volume of trade than any other country. Of the large industrial nations India has perhaps the least of such statistics. The success which is attending the present detailed studies in the United States warrants us in stating that India's economic prosperity would be enormously enhanced were such statistics available here. To be sure, it would be even more difficult in many respects to collect such statistics than it is in the United States, but we believe much more could be done than is being done at present. India needs also many more men with sufficient training and knowledge for the interpretation of even the limited statistical material available.

For those who are attempting to evaluate and use current statistics and and to assist in gathering other needed statistics, and who wish to know what is being done elsewhere, what methods are being used and what sort of statistics would be desirable, we can recommend "The Problem of Business Forecasting" as an excellent book of reference.

CLARK WARBURTON.

Co-operative Democracy, BY JAMES P. WABASSE, New York, Macmillan & Co., pp. 493. Price 3-50$

This well got up, well printed, easy-reading book, is divided into five books which indicate the range, as well as the depth of its subject-matter.

Book I, treats of the "Philosophy, the Principles, and the Trend of Co-operation." It informs the reader of the meaning and methods of Co-operation and the Ethics on which Co-operation is based. It then goes on to show how this principle can become an active and successful business principle, and not merely the impractical wish of the Co-operative dreamer. It then goes on to show how, if the Co-operative principle were adopted in the conduct of Industry and Trade, Science and Art would become emancipated. Art and Science would then not merely be the possession of the privileged few, but the right of every member of society, young or old, rich or poor. Then it would make for real increase and spread of Knowledg, Beauty, better Order, and Health of the people, finally leading on to the Brotherhood of the Nations of the Earth and making for a Bigger, Finer Humanity.

Book II treats of Co-operation and State. It criticises the present system of centralised forms of government and maintains that they are not democratic, since Political Democracy without Industrial Democracy is

"Sterile". It endeavours to shew that the State is only a present necessity, but must eventually fade away and give place to the Co-operative form of political existence.

While we agree with a great many of the arguments brought forward by the writer in the development of this part of the subject, we must confess that we do not feel that he has made out a convincing enough case to shew that his prediction will come true. The fact that in 1920 the Austrian Government was not able to cope adequately with the problem of feeding the population, and that the Co-operative Union of Austria at its Annual Congress at Linz volunteered to deal with the situation; or the fact that Mr. H. M. Hyndman, the founder of the Social Democratic Movement in Great Britain advised the British Government to hand over the administration of the Post Office to the Co-operative Societies; these and similar facts to our mind are not sufficient proof that the Co-operative form of society would be best fitted to take up the control and direction of the highly complex and delicate and technical work of government of modern communities of people. We need more convincing arguments than these to establish this point.

Book III, treats of Co-operation and Profit-making Business. It tells of the nature of the Profit-Motive, and its effect upon Society, how it lowers the purchasing power of the consumers, how unemployment, lockouts, poverty and hunger follow in its train, how it creates Monopolies and Privileges, re-acting adversely not only upon the economic but the moral life of society as well. While it does not deny that great progress has been made in Science, Industrial arts, and the practical well-being of the people under pressure of the Profit Motive, yet the collapse of the system is imminent since a counter Philosophy of life has been conjured up against this system. This Philosophy of Life is an idealistic social philosophy, which for millions of people has taken the place of Religion itself, and they are willing to suffer and be persecuted for their cause.

Book IV deals of with Co-operation in relation to the various Labour Movements. This is a very valuable and helpful part of the book, since it shews in a comprehensive way the strivings of Labour, under various formations, Trade Unions, Socialist groups, of all varieties, trying to achieve a single end and object, namely Emancipation from the present form and system of Production and Distribution, and Social existence.

Book V records the Accomplishments of Co-operation. It gives the the genesis of the Movement, beginning with the Rochdale Pioneers, and hen carries the reader at a rapid rate round the world shewing the working of Co-operation in many lands. The Universality of the Movement cannot be doubted. Also one can see that in several countries it has, and will continue to have, a very important part in nation-building. We must here express our disappointment at the meagre mention that is made of the Movement in India. Undoubtedly the numbers of co-operators to the total population, and its operations in comparison to the total out-turn of economic activities is infinitesimal, yet none can gain-say that at least for the rural areas,—and these form the bulk of India,—there seems no better agency working for the economic and moral salvation of India's peasantry than the Co-operative Movement.

A chapter is devoted to Forms and Expression of Co-operation shewing the variety of Co-operative effort in almost every sphere of life. For instance, it is seen working in Distributive Stores, Housing, Banking, Insurance, Education, Recreation, Printing, Bakeries and Restaurants. Transportation, Courts and Arbitration, Whole sale Importing and Exporting, Manufacture, etc.

This book closes with a genarel resume which is very useful.

A Bibliography of well selected books is given, though we fear none dealing with India has been mentioned.

We believe that Dr. Warbosse, who is the President of the Cooperative League of the United States of America, and a member of the Central Committee of International Co-operative Alliance, has rendered a very useful service in adding this book to the growing literature dealing with Co-operation. This book is the out-come of years of study and practical experience in the control and working of the movement in the United States, and first-hand knowledge of the Movement in other lands as well. If we needed an enthusiastic and comprehensive survey of the subject we could not do better than take up Dr. Warbosse's book, " Co-operative Democracy ".

S. K. RUDRA.

Some problems in Current Economics. By M. C. Rorty; M. E., E. E., A. W. Shaw & Co., Chicago. New York London. Pp. 143.

This is a volume of five essays on industrial economics all connected one with the other. They are the result of, the author tells us in the preface, "A series of economic, financial and statistical studies undertaken by the writer as an incident to his connection with a large public utility organization". They are aimed at solving evils of the modern and industrial organization-chiefly the conflict between labour and capital. Let us at once say that in offering a solution of this most difficult problem of the industrial world, the anthor takes his stand on industrial facts as they have obtained particularly in America. He discards the extremes of individualism and Socialism or Communism as cures of this evil. He would steer clear of both and find a middle course that would embody the merits of both and eliminate their demerits. And this he believes is already to be observed in the industrial organization as it has evolved—the capitalistic system—in our own time, chiefly because this organization is a "going machine—powerful beyond any that man has ever before developed on a large scale to satisfy his needs, and flexible enough in design to adapt itself for whatever demands the future may make upon it." He admits there are defects in the machine but these its flexibility will allow of being rectified. It is, therefore, he says that "Adjustments may be needed here, a drop of oil there, new parts in still another place, perhaps even a gradual transformation—but the machine as a whole must be preserved in continuous and certain operation." At another place he observes, and his observations point out, though indirectly, the defects of the machine. "Business organizations must be improved. Wasteful processes and methods must be eliminated. New machines must be devised. Business depressions must be checked. And, above all, there must be between employer and employees, between industries and interests, between all factions and groups of men"—a spirit of intelligent adjustment and compromise. The answer to how some of this should be done is attempted in some of the essays. In ultimate analysis the author's solution of the industrial ills is an avoidance of waste which is incidental to the capitalistic system, an increase of productivity, an honest and sympathetic understanding of each other on the part of labourers and capitalists.

All the essays are well written and afford interesting and enlightening reading.

G. D. KARWAL.

Central and Local Finance in China. BY CHUAN SHIH LI, PH. D. New York. Columbia University. Pp. 187. 1922.

Says the author in the preface, "Influenced by the wave of political democracy of the Occident, China is now in the throes of agitation for Provincial and Local Self-Government, which is virtually unattainable without separation of the sources of revenue between the Central and Provincial Governments on the one hand and the Local Governments on the other. This monograph is the author's humble attempt to solve this urgent politico-fiscal problem which has been absorbing the attention of his conscientious compatriots during the last decade or two." We are prepared at once to say that the attempt is an honest one. The author approaches the subject in a scientific spirit, analyses dispassionately the topics he deals with and offers his criticisms and suggestions like a man fired by patriotism yet not swayed by any unsound airy theory. We have every hope his work will prove of great value to those in the hands of whom the Fates have placed the destinies of that rather unfortunate country.

The work is divided into seven chapters. Chapter I deals with the general organization of the Central, the Provincial and the Local Governments in China before and after 1912—the year of the establishment of the Republic in the Celestial Empire. Chapter II discusses the past and present fiscal relations between those Governments. Chapter III narrates the history of the attempts by the people at separation of local and national finances. Chapter IV reviews the systems of national and local finance of France, Japan, Germany, America and England with a view to choose the best from them for introduction into the Chinese financial system. Chapters V & VI embody the lessons of these systems in the form of suggestions for adoption in China for the political and financial readjustment between the Central, the Provincial and the Local Governments. And the last Chapter deals with the fiscal relations between the Leased Territories, the Foreign Settlement and the Central Government.

G. D. KARWAL.

A Text-book of Economics. BY M. BRIGGS, M. A., B. Sc., University Tutorial Press Ltd., High Street, New Oxford St., W. C. London, 1923. Pp. 527. Price 8/6.

This is an excellent text-book of Economics and is, in our opinion, very well suited to the needs of the B. A. students of our University. In a short space of about 510 pages it covers the whole field of Economics and is yet clear and sound. The style is, of course, that of English writers on Economic topics—more scientific than popular. This might not appeal to those who take a spurious interest in Economic problems, but to students and teachers of the subject it should be welcome, required as they are to put things explicitly and scientifically.

The distinguishing features of the book are -

1. The arrangement of the subject,
2. Historical treatment of the subject where necessary,
3. And the inclusion of all topics pertaining to the subject.

1. The arrangement of the subject is different from what we are accustomed to see in text-books. This will be clear if we look at the parts into which the volume is divided and what they contain. These are four in number. Part I briefly gives the history of Economic Thought, the

influence of war experience on economic thought and the theory of Wants i. e., Consumption. Part II deals with Production and the Agents of Production. The Chapter on Land explains the phenomenon of Rent and that on Labour the theory of Population. Part III concerns itself with Exchange—that is the theory of Value ; and Part IV discusses Distribution. Under this part are included such topics as Laissez Faire and State intervention, Free Trade and Protection and Taxation Money and Banking, including a short history of the Bank of England, and International Trade.

To the appendices, three in number, are relegated Mathematical Economics, Scope and Method of Economics and the Structure of Economics respectively. And the rear is brought up by bibliography and glossary of economic terms.

2. Wherever necessary the author has treated the subject historically. The first chapter—history of economic thought—is purely historical. The chapter on land also is historical so far as it deals with the history of the theory of rent. Similar is the case with the chapter on the marginal theory of value.

3. As is clear from what has been written about the arrangement of the subject in the book, the volume does not leave a single economic topic untouched.

We have already said that the book is sound and scientific. We would gladly recommend it as a text-book for-the B. A. Examination of our University. The students will find in this one book what they require to understand the whole subject of Economics—so far as the theory of the subject goes. Of course, the book will have to be supplemented by another which will give the application of the theory to Indian conditions—a book like Kale's Indian Economics, and still another which will provide graphs, schedules and diagrams, for the absence of these in this book under review is a drawback of the book. Shearman's Drawback or the teacher himself can supply what is wanted.

G. D. KARWAL.

Education and Training for Social Work. BY JAMES H. TUFTS. New York: Russel Sage Foundation. 1923.

American Social Work in the Twentieth Century. BY EDWARD T. DEVINE and Lilian Brandit. New York. The Frontier Press. 1921.

What Social Workers should know about their own Communities. BY MARGARET F. BYINGTON. New York City: Russel Sage Foundation. 1924.

We have received a number of books and pamphlets from agencies like the Russel Sage Foundation, doing social work in America. We feel pleasure in reviewing the three above named here. The first of these discusses the aims and methods of education and training for social work. In Chapter I the field of social work is defined in five possible ways. In Chapter II the relation of Border-Fields of Social Activity to the main social work is discussed. In Chapter III the author discusses the question "Is social work peculiarly a woman's profession, or does it need both sexes?" His conclusion is that the profession requires greater attention from men who have as much place in it as women.

In Chapter IV he applies himself to the study of the question whether social work should become a profession like law, medicine or education, or should remain the pastime of individual souls with wide sympathies. In Chapter V the relation of education and training to social work is considered. Here we find a very interesting discussion of the problem: "Is the same type of education and training desirable for all social workers?"

In Chapters VI and VII the purpose and organisation of professional Schools is discussed; and in Chapter VIII, the question of qualifications of those wishing to join these schools is treated in a very exhaustive way. In Chapters IX, X and XI the problems connected with the curricula suitable for various kinds of social work are discussed. In Chapter XII the methods of imparting instruction are discussed while in the last chapter the need for fellowships and scholarships is emphasised.

From this brief statement of the ground covered by this book, it must be clear that it is a very important publication, and deserves a careful study from all those interested in social work in this country.

Number 2 is a pamphlet of about 62 pages, which gives us a full and connected idea of the progress of social service work in America. As we read through it we find that in that country "the negative policy of relieving destitution, or even the more generous one of preventing it, is giving way to the positive idea of raising life to its highest level." We in India have not taken seriously even the negative work. What an object lesson for all aspirants of national regeneration!

Number 3 makes out a strong case for the study of economic facts about the community we want to serve. Just as for the right improvement of a city or town a civic survey is essential, so also for economic and social development of a community or group of people, a close study of their economic condition their social customs, and habits is very necessary.

This is not all, we must also have "a knowledge of the laws bearing on social problems, of the activities of public departments and private agencies and of the untoward conditions that handicap individuals in the community." Data such as these will help to make clear, in the first place, "the nature and extent of our task, and the needs which are not yet met." "Furthermore it will enable us to know our tools and how to use them. We rely habitually on laws, governmental departments, and other instrumentalities to help us in carrying on our own work." We must know what they are doing, and what they are expected to do; otherwise there is danger of overlapping of efforts. "Specific knowledge is here called for as against the general impressions on which too often we rely."

It is again a very useful publication for all those anxious to do some thing for their city or their fellowmen.

B. G. BHATNAGER.

How to Form a Company. BY HERBERT W. JORDAN. London Jordan & Sons Ltd., 1924. Pp. viii, 103. Price 1s. 6d.

We have had just time enough to glance through this little book, and we are quite prepared to say that it will serve as a very useful handbook to the study of a very important subject in the present-day economic conditions of life. A book which has passed through fifteen editions has thoroughly justified its existence and needs no "puffing" at the hands of a reviewer. Business-men and students alike will profitably dip into its pages. We recommend this book to the attention of students.

S. C. CHOWDHRY.

Handbook of Commercial Geography. BY GEO G. CHISHOLM. London: Longmans Green & Co. Ninth Edition. 1922. Pp. xv, 824. Price: 25s.

This is a post-war edition of Mr. Chisholm's famous work which has been before students of geography for over a quarter of a century. The author is already well known for his care and patience in maintaining edition after edition of this great work of reference. The book now appears in a form more completely recast than any previous editions, in spite of the fact that 'the work is issued to an unsettled world, one of which the settlement on a basis allowing of a new period of orderly evolution seems still remote.' He has therefore done well, in most cases, to use the statistics of 1913-14. The statistical tables, however, have been considerably extended and increased in number. The author as usual has shown greater anxiety to make the figures instructive than to furnish the latest figures procurable. As he has remarked in the preface, 'the main thing is to make the figures, so far as possible, comparable with one another; the chief aim in the collection of statistics being to illustrate tendencies in progress.'

Although the book contains much that was to be found in the older editions, the first section has been completely remodelled. It oc cupies a larger number of pages than it did formerly and contains many new and interesting additions.

The next section has undergone a similar change. It is now entitled "Regional Geography," the portion dealing with Europe being now mainly concerned with the question of trade routes, which is indeed a most welcome improvement. As another critic has remarked, the author has maintained his philosophical liberal traditions and has kept the book free from the too common errors about "inferior races" and the like.

It is needless to say that this book amply fulfils its purpose and should become of increasing value to students and teachers of geography in this country.

KOSHAL KISHORE.

Commercial Geography. BY J. F. UNSTEAD E. G. R. TAYLOR. London: George Philip & Son, 1922. Pp. 239. Price: 4s.

The name of the authors is sufficient guarantee that what is claimed for the book is fully justified. Although the book has been before us for a number of years, our teachers in the High Schools have not had much occasion to make use of anytext-book of Commercial Geography, as the geography courses have so far been limited to the study of elementary general geography. With the introduction of Geography in the Intermediate classes and of Commercial courses, it is hoped that this aspect of geography will receive increasing attention.

The book is intended for comparatively junior students. As the authors have said in the preface, 'they have kept in mind the requirements of examination candidates, of whom each year the examiners demand fewer facts but require instead fuller explanations thereof.' It is divided into three parts. In Part I is given a brief summary of those facts with regard to climate and vegetation which have the most direct bearing on the economic aspects of geography. In Part II the chief plant, animal and mineral products are included and very readable accounts are given of their distribution and preparation. Part III is devoted to a regional treatment of the subject and at the end contains a useful bibliography. If used in conjunction with a good atlas, the book should prove suitable for elementary students of commerce.

KOSHAL KISHORE.

Junior Business Training. BY F. G. NICHOLS. New York: American Book Company. 1923. Pp. 233.

This little book is intended for use as a text-book in junior schools. It is meant to serve a threefold object, namely, to give general information about business procedure which would be useful to every boy and girl whatever vocation he or she may adopt in life, to provide a suitable course of training for some junior positions in business offices and to serve as a foundation for higher specialized courses in commercial education. The book is divided into two parts. Part I deals with the keeping of records, filing of correspondence and the use of some business forms and treats of the services performed by rail road, telephone, telegragh, banking and insurance companies. Part II deals with the duties of persons filling junior positions in business offices, *e. g.* messengers, filing clerks, order clerks, receiving clerks, stock clerks. The book is a useful addition to the existing literature on the subject inasmuch as the treatment of the subject-matter is at once very novel and interesting. The author is very keen on the 'Service ' idea in trade and industry, the subordination of private profit to service of the community. 'You should aim first to be a good citizen, and then to become skilled in some line of work' is the burden of the book. No doubt these are excellent ideas to inculcate, but we find them over-emphasized throughout the book with scant regard for relevancy. The author also seems to forget at places that the book is intended for very young boys and girls. The introductory remarks in some of the chapters, though unexceptionable in themselves, are not only somewhat out of place but seem to be beyond the mental range of young people. For instance, in the chapter on " Preparation for service " the author sums up in about a dozen lines the evolution of society from pre-historic times to the formation of the League of Nations. He winds up with : "The recently formed League of Nations represents an effort to extend to some extent at least the responsibility of every unit of organised society for the general welfare of people of every other unit. " How many young boys can really grasp all this ? In the same chapter we find another sentence : " Regard the general studies and business studies in your course of equal value when they are judiciously woven together into an educational program." The book is full of passages like this. The advice given here would be more in place if offered to educational authorities like our High School and Intermediate Education Board. The voluminous exercises and questions added to each chapter are the most outstanding feature of the book. The questions are of absorbing interest, but the text on which they are based gives little or no preparation for answering them. Some of them read like riddles capable of more than one solution, many require only common sense and no special training for answering them and a large number can be answered only by those who possess practical experience. They are really very rich material for the teacher, but an average teacher would prove no more capable of handling them than his pupils. The book should be a useful addition to the libraries of schools and colleges but, considering the curriculam of schools in this country, cannot be recommended as a text-book.

B. N. CHOPRA.

"*Catastrophe and Social Change*". BY SAMUEL HENRY PRINCE, PH. D. Edited by the Columbia University, Economics Department.

This interesting addition to the numerous detailed studies in the Social Sciences, now in the market, maintains throughout the high standard that has always characterised the publications of Columbia University. On the sixth of December 1917, a French munitions steamer heavily laden with trinitrotoluol, the most powerful of known explosives, was steaming to her anchorage in Halifax harbour when an empty Belgian relief ship swept across her pathway. There followed a confusion of signals, a few agonised manoeuvres, and the vessels collided. The loss to the city was two thousand slain, six thousand injured, ten thousand homeless, thirty-five millions of dollars in property destroyed, three hundred acres left a smoking waste, and everything conceivable disorganised.

A detailed study of the response made by the people to this challenge of fate is the object of the author, and on the whole the outcome is a book of some scientific value. Dependence on newspaper reports, has, to a certain extent, vitiated the chapter on 'Catastrophe and Social Psychology.' Patient personal observations of the student of Sociology must of necessity be different from the hysterical eloquence of the Press reporter. The chapters on social organisation, social economy, and social change, should be read by all students of the Social sciences. Though the book makes no lasting contribution to the science, and scientific accuracy has occasionally been sacrificed to rhetorical effects, the average reader is sure to find in these pages a good many facts wholly novel to him.

K. C. MATTHEW.

Art Principles in House, Furniture and Village Building. BY ARTHUR BRIDGEMAN CLARK. Stanford University Press, Stanford, California, 1921. Pp. 125.

This publication is an exposition of designing principles which every housebuilder, furniture user and village builder should know, and is an outcome of class lectures delivered by the author at Stanford University. The illustration material was gathered from both far and near with the aim of stimulating study and clarifying fundamental principles. The author has pointed out in the brief preface to the book that "Well designed houses, cities, villages, yards and furnitures, are an essential and integral part of worthy civilisation. And so closely do the possibilities of individual attainment in these directions depend upon wide-spread culture that it is a serious national concern to make knowledge in this field general".

"Ignorance in Art is more dangerous than illiteracy. Furniture, houses and towns are being built constantly either well designed or poorly designed. Mistakes in street planning made one or two hundred years ago are still obstacles to the dignity and beauty of many cities, and mistakes made today will cause annoyance hundreds of years hence. The same statement holds with regard to housebuilding". The book aims to meet this situation in the most practical way by explaining the principles of design in simple terms and illustrating them with such familiar material that everyone, builders of small houses, of large houses, and those who lay out residence tracts may feel their responsibility.

The book is divided into three parts namely, the Exterior, Floor plans, and Interior, and House surroundings. The exterior or street appearance of houses belongs to the public and the interior may belong to the dweller in the house. Consideration of proportion, of details, the relation of the house to its site, soil, surface, and surrounding foliage, its architectural style, its planning and interior apartments are matters of fundamental importance. Some houses may fail or partially fail in proper distribution of parts and yet be pleasing because of well designed individual features or well planted grounds. The chapters on proportions or comparative sizes and positions, details and treatment of surfaces and edges and styles in domestic architecture in the United States are very interesting and show that similar lines of study in those subjects may be taken up by those who are seeking to reconstruct India.

The illustrated chapters on 'Floor Plan', 'The Kitchen and Pantries', 'Furniture', and 'Interior Designs' demonstrate to what extent well thought-out and premeditated plans in the building of a house may add to the blessings of a comfortable home. In a well ordered house, with every thing at its proper place and within easy reach, considerable economy in time can be effected. And to this end "The services of an expert architect are invaluable".

The concluding chapters on 'City Planning and Garden Cities' and 'Planning of Grounds' furnish useful and interesting information to town designers, and to those connected directly or indirectly in municipal administration.

The author has treated his various objects with remarkable skill in a clear and comprehensible style. The book provides throughout pleasant and interesting reading and will serve as a good compendium for 'House designers'. We commend the book to all lovers of art and progress.

JAGANNATH PRASAD SRIVASTAVA.

Money. By TRUFANT FOSTER and WADDIL CATCHINGS. Second Edition, revised. January 1924. Pp. 409. Houghton Mifflin Co.

The War destroyed the foundations of the world economic order and nowhere were its effects felt more deeply than in the currency systems of nations. A restatement or renovation of the doctrines dealing with money in the light of new facts became absolutely necessary. Sufficient experience has been gathered to enable this work to be done with a clear understanding of the forces actually in operation, and this experience has been utilised by Fisher, Cassel, Keyness and a host of other economists in formulating a thory of money, which is really as old as Ricardo, but is new in the sense that it interprets facts in the light of new circumstances and therefore comes to new practical conclusions. It now remains to popularize the net results of the labours of those scholars. This work has been attempted for American readers by Messrs. Foster and Catchings in the book under review. They are admirably equipped for the task, for the former is the Director of the Polak Foundation for Economic Research and the latter is a member of Goldman, Sachs and Co., and is thus in touch with economic realities. The result of this combination of economic theory and business talent is an accurate and extremely interesting treatise on money, which avoids the obscurantism associated with books of this nature without falling into the crudities of the amateur man of business. The fact that within six months of its first publication, a second edition was called for, is an index of its popularity which many English and Indian economists will envy.

The main defects of the book are its discussive style and its exclusively American view which detracts somewhat from its usefulness as a book for non-American readers. There is needless reiteration of commonplaces, and there are minute discussions of all the currency theories which American manufacturers of motor cars and phonographs and comic actors have thought fit to propound. One feels that the matter of the book could have been compressed in much less space. But we may easily overlook these faults, if we remember that the book is written as much for the average American reader as for students. In England and India, even members of the Legislature speak with bated breath about currency and exchange. The eloquent members of the Legislative Assembly become mute when such obscure problems are discussed and leave them to be decided by the

Finance Member and a few fortunate mouth-pieces of Indian Economists. In the House of Commons, Lt. Col. Hurst said: "Of course this subject of foreign exchanges is one I know very little about, and I believe very few people do know anything about it. Indeed, I have read that only one person knows the real arcana of foreign exchanges, and he is in a lunatic asylum......it might be wise to appoint a small committee of experts, if there are any in this country, who do understand this question." Such modesty would be out of place in the free and democratic atmosphere of America, where every body from Edison and Ford downwards seems to take a hand in the discussion. It will interest the professors of the 'dismal science' who are also admirers of Charlie Chaplin to learn that currency reform is a serious passion of his life. He is not poking fun at the economists when he says "My solution would be to eliminate the Gold Standard and have the Government issue currency based on production", because, in his opposition to the gold standard, he is in respectable company. It appears from this book that Ford is an incurable inflationist and Edison a champion of a commodity basis as against a gold basis for money. It would seem that the recent instability of the gold dollar has given rise to a number of wild-cat schemes for basing money on anything but gold—land, general property etc. labour hours, farm products. The authors have taken great space and pains to prove that all these are less satisfactory than gold. They have no difficulty in upholding the cause of sound currency against the onslaughts of Edison, Ford and Charlie Chaplin combined. It should not be understood that this triumph is as inglorious as that of the man who boasted of having beaten both the billiard champion and the chess champion of the world, the former at chess and the latter at billiards, for in a country where presidential campaigns are fought on currency questions and where everything important is decided by vote, the service rendered to the cause of sound currency by the reputation of such popular heroes is not small. In these discussions the authors are, however, wrong in attributing the "death of currency" which both Russia and Germany felt at the time of their greatest inflation, to the desire of people for "ready cash" (pp. 88). It was due to the fact that every holder of Russian and German notes, being taxed by means of inflation, hastened to part with them as soon as possible, with the result that the enormously depreciated currency, though nominally large in amount, was really insufficient to finance the minimum cash requirements of the country.

In spite of the fact that the authors are not oblivious of the defects of the gold standard and pay some lip service to the well known views of

Irving Fisher, they adopt a cautious attitude to the new projects of currency reform adumbrated by Fisher and Keynes. They admit that Fisher's standard based on a collection of commodities is the best but reject it on the insufficient ground that the "standard will change from time to time as new products appear and new needs arise". Their real reason against it, however, is that the time is not yet ripe for abandoning the gold standard and devising an ideal standard which illustrates the curious combination of scientific wisdom and popular prejudice, which Keynes notes as an American characteristic. In this connection the authors say, "It may be admitted that the use of any gold basis at all is a concession to human weakness. So is the use of jails. If human beings were quite different and if their political representatives could be counted on to act with adequate knowledge and complete wisdom, it might be possible to develop monetary systems that would automatically adjust themselves to business needs, and release for the arts the world's stores of gold." Against the argument of waste of the gold standard, which Keynes has calculated to be £ 100,000,000 per annum in the U. S. A., the authors reply, that the people of the U. S. A. pay far more each year for chewing-gum than for the maintenance of gold reserves: "Indeed, when we consider the magnitude of the interests involved, the waste seems negligible."

The authors distinguish between 'sound' money and 'stable' money. By 'sound' money they mean money fully convertible into gold which acts as a curb on inflation. But they recognise that gold itself is not stable and desire that it should be made so by artificial means, if necessary. They propose to do so by manipulation of the rediscount rate by the Federal Reserve Board, and by expanding and contracting currency by buying and selling securities in the market when prices fall and rise.

From this it would appear that the authors, like Hawtrey, do not beileve in an unmitigated gold standard but support what is nowadays called a 'manageo' or 'controlled' gold standard, according to which gold instead of regulating all values, will have its own value regulated by a fixed unit of purchasing power. This appears to be the half-way house between an unrestricted gold standard and the standard of the reforming economists, to which the Anglo-Saxon countries of England and U. S. A., seem to be moving perhaps because they believe that it is more respectable and constitutional to deprive king gold of its powers than of its head.

Space forbids us to examine other points in the book which is full of interesting matter. The authors have rightly emphaized the importance of money, and maintained firstly, that monetary causes of crisis are far more important than the non-monetary causes suggested by writers like

Douglas and Hobson. The arguments are illustrated by diagrams, and on the whole the book fulfils the purpose for which it has been written, *viz.*, to serve as a ground work for further studies. A similar book adapted to Indian conditions would be useful for our students and uninstructed legislators.

H. R. BATHEJA.

Land-Value Policy. BY JAMES DUNDAS WHITE, M. A., L. L. D., London: the United Committee for the Taxation of Land Values. 1924. Pp. xx, 205. Price: 2s. net.

Dr. White is already the author of "Land Reform in Theory and Practice" and "Land Value Problems." He states the whole case for land value taxation briefly and clearly. He believes in the untaxing of houses and other improvements. He would get over the difficulty of "improvements that merge into land" by allowing them exemption for a period of forty years. He believes that land value taxation will tend to force the land into the hands of the cultivators and will thus facilitate much needed reforms in land tenure. After dealing with these subjects, he has given chapters on rent, wages, capital, and inventive progress, showing that every invention, whatever its effects on wages or interest, must increase rents, and the value of the land. There are interesting, practical chapters on legislation, valuation, and the method of collection, and notes on marketing, machinery, contracts, agricultural rates, title-rentcharges, land acquisition, etc.

The question has great importance in India to-day in view of the appointment of the Taxation Enquiry Committee, who are particularly inquiring into the difficulties of sub-infeudation and mortgages in connection with land taxation. Dr. White gets over the difficulty of multifarious claims to some share in the surplus produce or to some sort of toll, tithe, or feu-duty, by making the basis of taxation the "annual land-value,"—by which he means the sum-total of rights that would attach to the fee-simple of the land, if leased in perpetuity, free from all incumbrances and taxes,—and by applying to this annual land-value the principle of proportional contribution by all who have any share in these rights. For the mortgage difficulty he quotes the New Zealand practice of subtracting from the land tax whatever income tax has been paid by the holder of the mortgage. Our chief difficulty in India, however, is to know how to deal with the problem of the small cultivator of an uneconomic holding, who needs all that share of the surplus produce which is left to him to exist decently. We should like to ask Dr. White to tell us whether it is good economic policy to tax such a man even if he holds directly from the Crown.

C. D. Thompson.

CURRENT NOTES.

OURSELVES.

We wish to take this opportunity of expressing our deep appreciation and gratitude for all the work done for the *Indian Journal of Economics* by Prof. Clark A. Warburton, who has now gone to America. During the last year and a half he was our Managing Editor and a frequent contributor to the Journal. We cannot speak too warmly of his efficiency in both these capacities and of the punctuality with which the Journal appeared. The Provisional Agreement with the Indian Economics Association was almost entirely due to his efforts. We wish we might hope to have him soon with us again in India.

We have to add that the Provisional Agreement was discussed at the Benares Conference and negotiations are now going on between the representatives of the Indian Economic Association and our University (Allahabad) for the settlement of the modified terms. We sincerely hope that we shall soon arrive at an amicable settlement which will ensure the smooth and efficient conduct of the *Journal* for the service of Economic research and progress in this country.

THE INDIAN ECONOMIC ASSOCIATION.

The Indian Economic Association held its Eighth Conference at Benares this year from the 4th to the 7th January inclusive. The April issue of the *Journal* will be the Conference Number and we hope to bring out a full report of the Proceedings and the Papers that were submitted, read and discussed at the Conference. It is hoped that the members who participated in the Conference or attended it will oblige the Managing Editor with their notes or contributions at an early date.

THE TAXATION INQUIRY COMMITTEE.

The Taxation Inquiry Committee has been appointed and held its first public sitting on the 12th December 1924. A comprehensive questionnaire has been drawn up and widely circulated amongst Economists, business-men and others calculated to render help in this difficult and important problem of vital national importance. They have entered upon their labours in a thorough business-like manner and are sparing themselves no trouble. We feel that whatever their recommendations, they will at least be the result of persistent hard work and most thorough investigation. The Committee is composed of the following gentlemen, well known for their ability and public services :—

Sir Charles Todhunter (Chairman), Sir Percy Thompson, Maharaja of Burdwan, Hon. Sardar Jogendra Singh, Dr. Paranjpye, Dr. Hyder and Mr. W. B Brett, Secretary.

THE ECONOMIC INQUIRY COMMITTEE.

It does seem that the days of *laisser-faire* are well over in India and that the State is increasingly interesting itself in the economic welbeing of the people. And so we have yet another body instituted to investigate matters. The new body created is the Economic Inquiry Committee. We have a particular, almost a personal, interest in this Committee because one of its Members and Secretary is none other than the Head of our Department of Economics and Commerce, Prof. A R. Burnett-Hurst, M. Sc. We shall miss him much from our midst, but we console ourselves with the thought that what is our loss is the country's gain. We take this opportunity to extend to him our heartiest congratulations on the honour conferred upon him in this appointment, and we send him off with our sincere good wishes for the great work that lies before him.

The other members of the Committee are:—

Sir M. Vishvesvaraya (Chairman), and Rai Bahadur Pandit Hari Kishan Kaul.

RECENT PERIODICALS

FOREIGN

NATIONAL MUNICIPAL REVIEW

DECEMBER 1924.

Garbage and Refuse Disposal a Matter of Cleansing Rather Than Health. BY M. N. BAKER.

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

JULY-SEPTEMBER 1924.

Share Tenancy in France. [BY M. BEAUFRETON.
Rural Banks in Germany. BY F. J. ROHR.
The Problem of Small Occupying Ownership in Agriculture. BY E. FERRARI.
The Maintenance of the Agricultural Labour Supply in Scotland During the War. BY J. M. RAMSAY.

THE AMERICAN ECONOMIC REVIEW.

SEPTEMBER 1924.

Graphic Illustration of the Laws of Price. BY NORMAN J. SILBERLING.
Recent Developments in Branch Banking. BY HOWARD H. PRESTON.
Proposed New Central Gold Bank of Germany. BY E. E. AGGER.

ECONOMICA.

NOVEMBER 1924.

Alfred Marshall, 1842-1924. BY PROF. EDWIN CANNAN.
Competitive and Social value. BY PROF. L. T. HOBHOUSE.
Short and Long Rates of Interest. BY F. LAVINGTON.
The American Cotton Crop and the Indian Monsoon. BY C. H. MARSH.
The Recent History of the Copper Trade. BY D. C. MORISON.

THE ECONOMIC JOURNAL.

DECEMBER 1924.

A Retrospect of Free-Trade Doctrine. BY PROF. SIR WILLIAM ASHLEY.
The Economics of the Dawes Report. BY C. W. GUILLEBUND.
The Incidence of Costs. BY PROF. T. N. CARVER.
Sir Thomas Gresham and the Foreign Exchanges. BY H. BUCKLEY.
Bibliographical List of the writings of Alfred Marshall. BY J. M. KEYNES.
Obituary: Maffea Pantaleoni. BY J. SOYEIA.

POLITICAL SCIENCE QUARTERLY.

SEPTEMBER 1924.

The Attempt to Establish the Eight-Hour Day, by International Action I. BY HERBERT FIES.
The Taxation of Real Property in Denmark. BY JENS WARNING.

THE JOURNAL OF THE MINISTRY OF AGRICULTURE

DECEMBER 1924.

Farm Worker's Budgets. BY A. W. ASHLER.

GOOD ROADS.

November 1924.

The Development of Rubber Block Pavements. By Edgar S. Dovi.

GARDEN CITIES AND TOWN PLANNING.

December 1924.

Town-Planning and Regional Development—Report of a lecture. By I. C. Gibbon, C. B. E., D. Sc.

THE JOURNAL OF POLITICAL ECONOMY

December 1924.

Inequality and Accummulation. By A. F. Mc. Goun.
Objections to Family Wage System. By Paul H. Gouglas.
Price Responsiveness. By L. S. Lyon & T. Edward Rassieur.

BRITISH CHAMBER OF COMMERCE JOURNAL

December 1924.

China and the Special Tariff Conference (The Relations of Central and Provincial Government Finance) Sir Francis Aglen.

RECENT PERIODICALS

INDIAN

THE BENGAL-BEHAR & ORISSA CO-OPERATIVE JOURNAL

OCTOBER 1924.

Housing Problem in Calcutta.—What Co-operation can do to solve the Problem. BY MR. A. K. BOSE

THE AGRICULTURAL JOURNAL OF INDIA

NOVEMBER 1924.

Research Work on Animal Nutrition in India. BY F. J. Worth, M. SC, B. SC

CALCUTTA REVIEW

DECEMBER 1924.

Agricultural Statistics of British India.

Some Currency Lessons of the War. B. RAMCHANDRA RAO.

BOOK RECEIVED.

A National System of Taxation. By A. RAMAIYA, M. A., P. S. Muhadeva Iyer, 1110, Naick New Street, Madura. 1924. Pp. 252.

Erotemidi Economica. Volume Primo Bari Gins Laterza Figli. 1925 Pp. 375.

Report on Indian Railways. Volume II.

History of Indian Tariffs. By N. J. SHAH, B. A., PH. D., Thacker Spink & Co., Ltd., Bombay, 1924. Pp. 433. Price: Rs. 7-8as.

Trade, Tariffs & Transport in India. By K. T. SHAH. Prof. of Economics, Bombay, The National Book Depot, Bombay., 1923. Pp. 445. Price: Rs. 10.

Roads to Freedom & Slavery. By RATISH MOHAN AGARWALA, M. A., LL. B., Garga Book Depott., 89. Chah Maimmaran, Meerut, 1924. Pp. 204. Price: Rs. 8.

The Science of Public Finance. By G. FINDLAY SHIRRAS. Macmillan & Co,, Ltd., St. Hartin's Street, London, 1924 Pp. 677. Price: $. 21.

Dumping A Problem in International Trade. By JACOB VIVER. The University of Chicago Press, 1923. Pp. 343. Price:

Annual Public Health Report of the Province of Behar & Orissa for 1923. By LT. COL. W. C. ROSS, M. B., CH. B., D. P. H., I. M. S. & P. F. FLOMER, A., I. C. E., R. S. I. Government Printing Press, Behar & Orissa, 1924. Price: Rs. 8.

Bulletine of the Tokio Chamber of Commerce. Vol. 8., Sept., 1924. Pp. 56.

Wealth & Taxable Capacity of India. By K. T. SHAH & K. J. KHAMBALA. D. B. Taraporevala & Co., Bombay, 1924, Pp. 347 Price: Rs. 10.

Problems in Business Economics. By HOMER B. VANDERBLUE., PH. D., A. W. Shaw Co., Chicago. 1924. Pp. 631. Price:

Principles of Merchandising. By MELVIN THOMAS COPELAND, PH. D., A. W. Shaw Co., Chicago, 1924. Pp. 368. Price:

Railway Transportation. By SIDNEY L. MILLER, PH. D., A. W. Shaw Co., Chicago, 1924. Pp. 905. Price:

Principles of Investment. By JOHN EMMETT KIRSHMAN, PH. D., A. W. Shaw Co., Chicago. 1924. Pp. 902. Price:

Currency & Exchange. By BRIJ GOPAL BHATNAGAR. M. A., F. S. S., Ram Narain Lal, Katra, Allahabad. 1924. Pp. 139. Price: Rs. 2.

Purpose of Education. By ST. GEORGE LANE FOX PITT. Cambridge University Press. 1924. Pp. 92. Price: $ 4.

The State Theory of Money. By GEORGE FKIEDRICH KNAPP. Macmillan & Co., Ltd., London. 1924. Pp. 306. Price: $ 10/6.

Financial Developments in Modern India. By C. N. VAKIL. D. B. Taraporevala. & Co., Bombay. 1924. Pp. 640., Price: Rs. 10.

The Ricardian Rent Theory in Early American Economics. By JOHN ROSCOE TURNER, PH. D. New York University Press. 1921. Pp. 221.

The General Problems of Psychology Conception. By ROBERT MAC DOUGALL, PH. D., New York University Press. 1922. Pp. 464.

Book-keeping, theory and practice. By ARTHUR H. ROSENKAMPFF., B. C. S., C. D. A., New York University Press. 1924. Pp. 230.

The Social Interpretation of History. By MAURICE WILLIAM. Sotery Publishing Vo., New York. 1920. Pp. 397.

Commercial Relations between India and England. By BALKRISHNA, M. A., PH. D. George Routladge & Sons., Ltd., London. 1924. Pp. 370. Price: $ 14.

INDIAN
JOURNAL OF ECONOMICS

Vol. V—Part 4

PAPERS READ
AND
DISCUSSED
AT THE
EIGHTH CONFERENCE
OF THE
INDIAN ECONOMIC ASSOCIATION.

PREFACE.

The Conference Session which was held at the Benares Hindu University on the 4th, 5th, 6th and the 7th January, 1925, was a remarkable one from several points of view. The Conference was opened, for the first time in its history, by an Indian Prince, His Highness, Maharaja Sir Prabhu Narain Singh Bahadur of Benares. It was presided over by an experienced and leading businessman, the Hon'ble Mr. Lallubhai Samaldas of Bombay. For the first time, it concentrated its attention on a single subject of national importance of great practical utility and of absorbing current interest. Another notable feature of the Benares Conference was the presence of the President and Members of the Indian Taxation Enquiry Committee. The Conference was attended by over forty delegates, about a hundred student members and a number of distinguished visitors.

The Conference began on Sunday, the 4th January at 11 a. m. with the Welcome Address of the Chairman of the Reception Committee, Pandit Madan Mohan Malaviya, the Vice-chancellor of the Benares Hindu University. The Conference was then declared open by His Highness, the Maharaja Sahib of Benares, in a speech read out by the Maharaj Kunwar Sahib. The morning session came to a close at 1-30 p. m. with the reading of the Presidential address by the Hon'ble Mr. Lallubhai Samaldas. Five more meetings of the Conference took place, at which the Papers printed in this volume, were read and discussed. Besides the above six sessions, there were two meetings of the Indian Economic Association, where important business matters were discussed and new Office-bearers and members of the Executive Committee were elected. One important decision that was arrived at these meetings was to allot one day to the discussion of subjects relating to Political Science at the next Conference Session at Madras.

Two trips were arranged, one to Sarnath and the other to the Ghats and Temples in boats on the river. The majority of the delegates joined. It was with great regret that the visits to the silk factories and handlooms and to the gold and silver thread manufactories were cancelled owing to lack of time.

On the 7th January, in the afternoon, the Vice-chancellor of the Benares Hindu University gave an At Home to the members of the Conference and they had the opportunity of meeting the gentry of Benares and the professors of the University.

A group photo of the delegates was taken on the afternoon of the seventh January.

The Honorary Local Secretary wishes to convey his grateful thanks to all those who helped in various ways to make the Conference a success. He wishes to express his indebtedness especially to the following gentlemen, without whose co-operation and help it would have been impossible to hold the Conference Session at Benares:— H. H. the Maharaja Sahib of Benares, Pandit Madan Mohan Malaviya, C. A. Munford Esquire, Commissioner, Benares Division, the Hon'ble Mr. Freemantle, Senior member, Board of Revenue U. P., the Hon'ble Raja Moti Chand, the Maharaj Kunwar of Vijyanagram, Principal A. B. Dhruva, Colonel Vindeshwari Prasad, Mr. Lalit Mohan Roy Sen, Babu Durga Prasad, Manager the Vizanagram Palace, Benares, Babu Gur Prasad Dhawan, Mr. C. Y. Chintamani, Rai Sahib S. P. Sanyal, Mr. Nayar, Prof P. Seshadri, Pt. Lachhman Das, Mr. Odedhar, Mr. Yadunath Prasad, Mr. S. D. Pande, Pt. Ram Chandra, Mr. Banwari Lal, Dr. N. G. Shah, Mr.

Gyan Chand, Mr. K. C. Chatterjee and last but not the least, the student volunteers. The Local Secretary takes this opportunity of expressing his and the Local Committee's great appreciation of the valueable help rendered by the volunteers. The success of the Conference was due to no small extent to the hard work the student volunteers put in.

GURMUKH N. SINGH.
Hony. Local Secretary.

ADDRESS OF WELCOME

BY PANDIT MADAN MOHAN MALVIYA

Pandit Madan Mohan Malaviya, Vice-Chancellor of the Benares Hindu University and Chairman of the Reception Committee, in his Address of Welcome, said that the Hindu University felt particularly proud of the privilege of welcoming the members of the Indian Economic Association, who were distinguished scholars engaged in the study of problems which touched the vital interests of the people. He did not think that among all the problems that were now engaging the attention of men in India there was any which could compare in its importance with the question of the economic condition of India which dominated all other questions. They had many political and social problems, but all the other problems were affected by economic considerations. The theory of Economics had no value if it was not to be applied to the practical problems of the nations of the world.

NEGLECT OF INDIAN ECONOMIC PROBLEMS.

In India they had suffered a great deal too much by having given their attention purely to political questions to the exclusion of economic questions. They had given too much attention to the question of employment of Indians in the Services, to representation in various political institutions, but they had not given close attention to questions which affected Currency and Exchange, Banking, Communications and Transport and other allied problems. The result had been that while on one side political questions came into full play in the matter of the Indianization of Services, both in the Civil and Military departments, in the field of economics very little attention had been paid by them in India to the needs of the country. Where was a problem of greater importance than the question of Currency and Exchange and how much had not India suffered by reason of the system of Exchange that had gone on for these several years? He learnt that the total loss amounted to something like Rs. 120 crores by reason of the absence of any policy in regard to the Exchange system. In regard to Currency the question of the Gold Standard had been long waiting for solution. He felt that they had not given sufficient thought to the loss which had been inflicted upon the country by not having a gold standard. The Japanese started somewhat later than us but they had established such a standard soon after their Revolution in 1868. Now the Government of this country had very capable men to preside over their Finance Department, but it was unfortunate that the Government of India had no definite policy up to this time in regard to these important matters and the result had been a very great and enormous loss to the country. There was great necessity of this question being pressed upon the attention of the Government and the public.

THE INDIAN BANKING SYSTEM.

If they passed on to the other questions they would find that the need for an Association like theirs was very great. Let them take the quesion of Banking. Here in India they had banks before the Japanese Revolution in 1868. But now the Japanese had a perfectly organised system of banking. They had built up different kinds of banks to meet the requirements of the country in all possible directions. They had got a Mortgage Bank to lend money on long-term mortgages of immovable property; they had an Industrial Bank; an Agricultural Bank and numerous Co-operative Credit Societies. By means of all these the Japanese Government supplied their country with the necessary banking facilities without which no progress could be achieved in the financial position of any country. But here, unfortunately, in India, banking was not sufficiently developed, and industrialists found that they had not sufficient encouragement and sufficient means provided to give them the necessary help to promote industries and develop commerce The Imperial Bank of India did not serve the purposes served by the banking systems in Japan and Germany. If there was a State bank wherever there was a Collector's Office, collecting the revenues of the district, and doling out to the people, for the development of their industries, the money which had been poured into the Treasury, it would very soon alter the industrial atmosphere of the country ; but it was yet to come.

MERCANTILE MARINE.

Then there was the need of a Mercantile Marine for India. Though they could not expect to bulid a Fleet, certainly they could aspire to build a Mercantile Marine. The Japanese had their Exports and Imports carried on in their own ships. This question of India shipping was undoubtedly discussed by the Industrial Commissio but no solution had been arrived at. Who was to put this and othe important allied problems before the public and the Government i a manner that would attract the attention of both and lead to some definite result? If there was an Indian Mercantile Marine the gai to the country would be immense and yet there was no sign of an such Marine coming into existence at an early date.

INDUSTRIAL DEVELOPMENT.

Turning to the question of the industrial development of the country, Pandit Madan Mohan Malaviya emphasized the need of proper Protection for nascent and infant industries in India. The step recently taken to protect the Tata Iron and Steel Works was only a partial step and was not one which could solve the problem of Protection. Another iron and steel works on the lines of the Tatas' proposed to be started under the management of the United Asia Steel Corporation with a capital of Rs. 15 crores would have supplied the needs of India. Fifteen crores seemed to be such a small sum for the Government of India to find that it seemed a pity that for want of it the necessary development of the iron and steel industry in India should not have been promoted. If capital was not forthcoming in the country Government could borrow foreign capital without giving the creditors the right to manage, as they did in regard to railways. In the first instance the capital of the country had to be organised, and in the second instance foreign capital had to be welcomed as a loan and not in the shape of capital invested by a partner who was managing the business. After urging the need for extensive industrial and technical education, the speaker went on to show how Japan was able to promote her numerous industries by sending Japanese students to America, England and Germany to learn various manufactures and industries. Here, unfortunately, they had not an organisation in regard to these matters, nor had they a readiness on the part of the Government to take up these questions in the way in which a national Government would take them up. While feeling grateful for what the Government had done, he would say that there was a great deal more in these industrial matters which ought to be done and could be done. At the same time he would hold that educated Indians should have done very much more in order to press for a solution of these questions and also do what lay in their own power. They were aware that during the war India, contributed nearly £ 145 millions for the purpose of the war. If India could find that much money in order to show her good-will to England, certainly she should be able to borrow if necessary Rs. 100 millions in order to promote national industries and to find food for millions of people who now go on in their daily life without sufficient food. The number of men who were suffering from unemployment was daily increasing in every Province of India, and time demanded that the Government and the leaders of public opinion should concert measures in order to find occupations and employment for those hundreds of thousands of men of the middle classes, and this could only be done by organising a regular system of industries. The present suffering was sure to grow and increase in course of time, unless it was arrested and combated.

A Conference like this had very great responsibilities. Economic problems had not been sufficiently studied in this country. Our economics had been dominated by considerations which applied to other countries like England, America, Germany and Japan. The position of India was very different from the position of any of these countries. What was good today for England was not necessarily good for India. England had passed through several stages of economic existence. She adopted a policy of pure Protection in the earlier days. During the war England woke up to find that Germany had stolen a very great march over her in the commercial world. England had now veered round largely to the side of Protection. They wanted at present an Indian School of Economics. Now India depended for her economic theories and principles on the labours of men outside India who had not studied Indian questions and who had not looked on these questions from the point of view of Indians. Indians had lost a great deal and suffered enormously by reason of the absence of an Indian point of view in economic matters, and they stood to suffer a great deal more if they would not wake up to the necessity of building up their own School of Economics. She was a large enough country to require a School of Economics of her own. If this Association brought about such a change in the economic thinking of India it would have achieved a great result They should not hesitate to discuss their own problems with independence and with courage. In the end Pandit Malaviya urged that the Association should organize itself on a larger scale, and that its publications should be more frequent, and it should issue more pamphlets. He hoped that the labours of this Conference would lead to a practical development of their activities in that direction. He hoped that as a result of their Conference and discussions there would be a growing consciousness of the importance of economic problems not only in the minds of educated Indians who were non-officials, but also in the minds of those who were at the helm of affairs in the Government of the country He further hoped that their labours would lead to increasing the wealth of India and to a better understanding between India and England.

OPENING SPEECH

By his Highness Sir Prabhu Narain Singh
Bahadur, G. C. S. I., G. C. I. E., D. L.,
Maharaja of Benares.

Gentlemen,

I deem it a proud privilege to preside over today's function and to welcome here so many Economists of note and fame who have graced this meeting from all parts of our country at no inconsiderable inconvenience to themselves. I am fully conscious of the great honour you have done me by inviting me to take the Chair at the inaugural meeting of this Conference, though I had wished that this mantle of honour had fallen upon abler shoulders than mine.

The subjects which could be discussed at a meeting such as ours are practically endless, but from the Agenda which has been submitted to me I see that the subjects which the Conference is required to deal with are limited in their scope and belong solely to the sphere of Political Economy. With all deference to the opinion of the conveners of this Conference, I think that we could have met with greater advantage at a later date. Many of the subjects which we are required to consider are being dealt with by the Taxation Committee which by a singular coincidence sits at our city simultaneously with ours. The Committee has the advantage of examining a large number of persons of all shades of opinion, and its Report is sure to shed light on many obscure and abstruse points connected with the subject matter of our deliberation.

To begin with Taxation. Taxation is no doubt an evil. But it is a necessary evil. It is the basis of all civic life. No corporate body can exist without it, more especially a body politic. Call it a subscription, a donation, a fee, a share, or a contribution, it comes to the same thing. All these are taxes in different forms meant to create a central fund to carry out particular objects in view. With a Government, taxation is the basis upon which its fabric stands. Different countries have different systems of taxation, according to their nature. One country's system does not necessarily suit another's. In India the land tax has been the mainstay of its government from time immemorial. Whether in the primitive code of Manu, the more methodical canon of the Buddhist Kings, the regulated system of Ain-i-Akbari or the scientific method of the present day Government, land tax, either in kind or in cash, has been the one chief source of revenue of the Government of this country. Of course it was supplemented by taxes on trade in different shapes and by such other sources. The needs of a Government determine the sum to be raised by taxation. The more civilized a government is, the more expensive it is bound to be. In a country like India, which is exposed to invasion from both land and sea, having a coast line of thousands of miles, and warlike tribes on its land flanks the military expenditure has necessarily to be taken into account besides administration charges, and this swells our budget on the expenditure side beyond all proportion. This shall continue to be the case until a system of conscription, in some form, is introduced in this country, for which, I am afraid, it is not likely to be prepared for centuries hence. In our country we have to deal with three governments, the Imperial, the Provincial and the Local. In other countries, I presume, there is not any need for Provincial governments, unless they are federated States like the United States of America, the South African Union or the Australian Federation, and consequently no provincial taxation But in a vast country like India, with a multitude of nations in different stages of civilization, speaking different dialects, a Provincial division, and its corollary a provincial taxation, is indispensible. Local taxation, however, stands on another footing. It can scarcely be called a tax in the strictest sense of the term. It is levied in lieu of specific services performed. These taxes are levied either for certain general services such for instance as sanitary services, supply of pure water, sweeping and lighting of streets and the like, or for specific services such as electric and telephonic connections and so forth. Municipal taxation is meant to meet the requirements of the people inhabiting the municipal area. The more you add to the amenities of their life the more they have to pay for it. Although in the strictest sense of the term, every tax is in fact levied for certain services rendered by the central authority either to the individual, to the community or to the nation But those directly affecting the individual are optional and avoidable, but those affecting the society or the nation are compulsory. An individual is not bound to pay for a telegram if he does not send a message, or to stamp an envelope if he does not post a letter. But he must pay his Income-tax, his land-tax, his duty on articles imported etc. etc., as these are meant for the well-being of the nation. Keeping aside the consideration of local taxes, I do not see any very pronounced distinction between Imperial and Provincial taxation. Barring duties levied on sea-borne trade and revenues derived from State trade such as from Railways, Telegraph and Postal Departments (I call them trades, as to my mind they cannot be anything else) and State monopolies, such as those of Salt and Opium, all taxes are realized through Provincial agencies and from Provincial sources. It is only an artificial administrative arrangement which earmarks a particular source of revenue or a part of it for Provincial or Imperial purposes. This arrangement shall have to be continued so long as the Imperial fund is not sufficient to pave its own way. Strictly speaking, duty levied on sea-borne trade is the only Imperial taxation levied in this country. Revenues derived from, Railways, Government monopolies of Opium and Salt, Post and Telegraph services, or Mintage can hardly be called taxes. I would treat them as trade profits. One is not bound to contribute to these revenues unless he has an occasion to derive a benefit out of them.

It will be futile to my mind to discuss here the question of the Provincial contributions to the Imperial exchequer. Whether any contribution should be paid from out of the revenues of the Provinces to the Central Government, and if so, what proportion of it, would depend upon the constitution of the future Government of India. Ordinarily it would appear to be a natural adjustment of taxes that those collected from Provincial sources be spent upon Provincial needs, and those collected direct through Imperial agencies be devoted to Imperial purposes. But as matters stand, at present, the so-called Imperial revenue is not sufficient to meet Imperial needs and consequently Provinces have to make the defeciency good by contributing towards it. The arrangement is certainly neither based on any well recognised principle, nor is sound from an administrative point of view. It was a tentative arrangement arrived at, in a haphazard way, to run the administration under the new Government of India Act.

The question now arises how to solve this problem. I am afraid it is not possible to do so until the Constitution of the future Government of India is finally determined. Assuming that some kind of federal system is ultimately evolved, the question shall have still to be decided whether that system will eventually produce the maximum amount of Provincial autonomy or whether it will imply the existence of a strong Central Government with the sphere of Provincial Governments strictly circumscribed. The position of India in this respect is peculiar the like of which will be hard to find in any other federated country. This country was so long administered on a unitary system. A change from that system to a federal system would naturally necessitate the surrender by the Central administration of some of its powers to the Provinces, whereas in other such countries where provincial autonomy did exist prior to their being grouped under a federal system, the component States had to surrender certain of their sovereign powers to the Central federal State. It is very difficult to say just at present what form a federated government in India should take. The note attached to one of the questions which the Todhunter Committee has issued very rightly and pertinently says, "It is obvious that the form of federation into which India might develop would be profoundly affected by the extent to which the country was threatened by external dangers and also by the degree of industrial and commercial development which it might attain. A federation of stationary agricultural States might be content with a system which in a highly industrial community would be unworkable." The importance, therefore, of laying down the lines on which resources should be distributed as between the Central and Provincial governments is obvious. The latter cannot be allowed to interfere with the economic unity of the country as a whole. Elasticity of revenue in both spheres of Government should be secured with special reference to their respective functions.

To my mind therefore it is not possible to draw a hard and fast line between the Imperial and the Provincial taxation in the present liquid state of the constitution of our Government. Until the system of government in the country is finally decided upon the problem of the reconsideration of the existing system of taxation and of the determination whether it is capable of improvement both in its incidence and in its machinery appears to be rather difficult to solve.

In distinguishing between Provincial and Local taxation, I fully endorse the opinion expressed in an article in "the Pioneer" that owing to the necessary dependence of the local authorities on less expert advice and service than are to be found in the larger Administrations, the grant-in-aid system is the most appropriate method of control supplemented by "optional" taxation, governed by consideration of the defects in the machinery at the disposal of local authorities, which make it necessary to rely almost entirely on the taxation of tangible property, and by an appreciation of the danger of double taxation. Before leaving this subject I would like to mention that the burden of taxation in this country is not evenly distributed. Some communities groan under its weight, while others are practically immune from its incidence. Taxes have been and are being levied in a haphazard manner. Although taking the whole of it into consideration the people of India cannot be said to be taxed beyond their capacity to pay, still, as I said above, the necessity of its redistribution on a more scientific basis is pressingly obvious.

Your Agenda also includes a discussion of the question of Industrial finance and of a Mercantile Marine for India. Our country is an agricultural country and as such it depends almost entirely upon the vagaries of the monsoon. The life of the peasantry in the words of Kipling "is a question between a crop and a crop." The benign British Government has done much to improve the agricultural position of the country by providing a network of canals for irrigation. Still it is not sufficient and upon the whole the monsoon still remains the main factor in the solution of the agrarian problem. And even at its best our country can only produce raw materials for the benefit of other countries. Unless and until we make India an Industrial country, in the strictest sense of the term, the problem of its salvation and of its finding an honourable place amongst the nations of the world must remain a riddle. Capital and labour are the two essential factors of industrial development. India possesses wealth, but it needs to be converted into capital. It is inhabited by sturdy and hard working people, but they require to be made to work. The capital in our country is very shy and labour exceedingly idle and unreliable. Both require gentle coaxing. Call out the capital from its dark burial vaults and the labour from its wonted lethargy and our country will stand second to none in respect of industrial supremacy. Of course, there are some political questions also to consider in this connection, such for instance as the question of Protection, the question of bounty, the question of Excise duty and so forth. But these, to my mind, are of minor importance and once we succeed in solving the main questions of Capital and Labour they will not be long to solve themselves. I am not in favour of indiscriminate Protection or of broadcasting bounties. These produce idleness and cut at the root of self-reliance. A victory in the field of competition is a sure sign of success in industrial life. Infant industries require Protection and some help in the shape of bounty and patronage but one must not rely upon these as sole means of success. With thousands of miles of its coast line, with its fine and protected harbours India must need a Mercantile Marine of its own which may be the nucleus of its future Naval strength.

With an almost inexhaustible amount of raw material within its reach, with a large store of the mineral wealth lying unexplored at its very door, with iron, coal and oil, the essential elements of any industry within its grasp, and a large labouring population awaiting employment, with natural facilities for sea-borne trade, our country ought to stand second to none in marching triumphantly upon the road to progress. We are more prone to talk than to work, and more eager for political progress than for economic and material advancement. And this to my mind is the cause of our backwardness. God helps them who help themselves. Let us learn to be thrifty, let us improve our social and economical positions, let us leave our differences behind and meet on a common platform of nationality, let us be an Indian first and anything else afterwards, let us prove loyal to our God, to our King, to our Country, to our community and to ourselves, and as surely as night follows the day we will become the first and foremost nation of the world.

With these few remarks I beg to declare the Conference open. May God help us in our deliberations and guide us on the right path.

PRESIDENTIAL ADDRESS

BY THE

HON'BLE MR. LALLUBHAI SAMALDAS, C. I. E.

GENTLEMEN,

I am sincerely thankful to the members of the Economic Association for their having done me the great honour of electing me as their President for the current year. While I very much appreciate the privilege which you have accorded to me of guiding the proceedings of this Conference, I thoroughly realize my dificiency for the post, for I cannot claim to possess a thorough and up-to-date knowledge of the science of Economics Those of you who were present at the meeting of the Association, when I was elected your President, will most probably remember that my name was proposed and approved after a suggestion had been made by the distinguished President of last year's Conference that an industrialist and a business-man, who had some knowledge of economic problems, on their practical side, might be given an opportunity of putting his view-point before the Conference from the Presidential Chair. I have referred, at some length to the personal aspect to base thereon a request to you all to overlook any defects you may find in my proposals from the theoretical economic standpoint. I may also add that I have not the personal experience of the economic conditions of other countries that my distinguished predecessor had, and consequently, I who " India only know " cannot, according to the well-known saying of Kipling, know India properly. That is a second defect for which I beg you to excuse me.

Economics should, I think, be the handmaid and not the mistress of Humanities. The typical economic man lived only in the brains of the old Economic writers, and one feels thankful that it was so and that he did not actually exist. For, if he had existed, although he might have been a very successful business-man, he would, at the same time, have been the most selfish and snobbish person seen on the face of the earth and such a man would not have minded the harm he was doing to others to achieve his object and would have, while getting more money-power, lost his soul.

One of the objects of the Economic Association is "to promote Economic science and the dissemination of economic informations as may be deemed advisable." The reason for doing this can only be to utilize the knowledge so gained, to improve the economic condition of our country-men, many of whom, as you know, are living on the verge of starvation and who have to struggle so hard to obtain the bare means of livelihood that they have no time even for thinking of improving their physical or mental condition. That our country is poor, very poor, is a fact not contested by anybody. Those who have any doubts about it have only to refer to the figures of the comparative wealth of countries in the West or of Japan, on the one hand, and of India, on the other, and they will see how far we are behind all these countries in respect both of accumulated wealth and the average income. Those of us who move round in villages, and try to keep our eyes open, know that the vast masses of our country-men eke out their existence in such a condition that they do not even realise that there is any better condition of life towards the attainment of which they can strive. The real tragedy is not that a large proportion of our country-men are living from hand to mouth, but that they have been leading this pitiable existence for so long a time that they have lost even the feeling of discontent with the existing state of things or of the desire to improve their condition. If, therefore, our Association and its annual Conferences are to be of any use, it is necessary that the information provided by the Association and the discussions carried on at this Conference should be followed up by action both by Government and by the public. It is very often said that 'knowledge is power', but knowledge, can only be power if it is utilised in the best interests of the people. For the purpose of facilitating the utilization of such knowledge, it is necessary, I think, that the discussions at these Conferences should be focussed on a few important points and the results of such discussions should be embodied in the form of resolutions, for the guidance of those who have to put them into execution. The President of the last Conference, referring to this question said that one of the difficulties in the way of embodying in the resolutions the considered views of such Conferences was "the fact that many members were Government officials and if they passed resolutions contrary to the policy of the Government, Government might find itself in an awkward position."

I do not see any reason why the opinion expressed by professors of Economics, as Economists, should be binding on the Governments that employ them, nor do I think that our Provincial Governments are so illiberal as to prevent their officials from giving free opinion on such an important subject as Economics, provided, of course, such opinion is given without personal, racial or political bias.

I want to refer, at some length, to the question of political bias because it has been alleged, more often of late than before, that not only Economists, but even business-men and industrialists are apt to examine questions not from the economic but from the political standpoint. I have tried my level best to find out the line dividing Economics from Politics, and I honestly confess that I have not been successful in doing so. The more one thinks of Economics and its allied subjects, such as Labour Problems, including Unemployment, land revenue problems, social reform, trade, tariffs and transport, and even educational problems, one finds that there is so much overlapping of these subjects that it is difficult to say where one ends and the other begins. Even a purely economic subject like that of Protection *versus* Free Trade is bound to be examined in each country and decided not only on economic grounds but also on national and practical grounds. The policy of Imperial Preference, so strongly supported by the present British Government, is not based purely on economic principles ; its real *raison d'etre* is to draw the Dominions nearer to England than they are at present—a political and not an economic standpoint. Or take the instance of economy in public administration and its effect on savings and consequently on the development of trade and industries. Both industrialists and politicians press for such economy and it is practically impossible to say that one does it on economic grounds and the other on political grounds.

It is but a truism to say that the economic condition of a country depends largely on its industrial development. When we talk of industrial development in this country, we sometimes fail to recognize the fact that agriculture is the staple industry of this country. The percentage of people living on agriculture proper and other allied industries is calculated by various authorities at something between 65 to 85 per cent., and, therefore, in any economic enquiry that is undertaken it is necessary to give the first place to agriculture. Not only should a careful examination into the existing condition of agriculture and agriculturists be undertaken but serious attempts should be made to find out the means of improving the same. The want of labour-saving machinery, the sub-division of land into uneconomic holdings, the lack of cheap and easy credit and the absence of scientific knowledge of agriculture are the main reasons why agriculture in India is in so backward a condition. Any inquiry into agricultural problems will have to include an inquiry into the land revenue system of the country which varies from Province to Province. One of the first points that will emerge in discussions on the land revenue system is whether land revenue is a tax or rent. If it is a tax, as is argued by many scientific economists, then the question arises why even the owner of the smallest agricultural holding has to pay the land tax without any exemption, while incomes from sources other than land get exemption up to Rs. 2,000 per annum In this connection, attention may be drawn to an anomaly that while a man who invests in land is not charged income tax, another man who is more enterprising and invests in industries or one who invests in trade and commerce is charged an income tax on the profits that he makes on such investments. In such circumstances, it is not surprising if the richer classes invest their savings in land and thus raise the price of land by undue competition and then try to get a return on their investment in land by rack-renting. Under the existing land revenue system and the Income Tax Act while the smaller land holders have to pay a proportionately large portion of their income as land revenue, the bigger land-lords have, on account of the exemption from payment of income tax, to pay proportionately less. The problem, complicated as it is, will have to be considered in the light of the existing Hindu and Mahomedan law under which all sons have equal right in the property of their fathers and in accordance with which lands are being sub-divided into uneconomic holdings. The question ought to be tackled as a whole if there is to be a re-adjustment of the taxation of the country on a correct scientific basis ; and I hope the Taxation Committee, whose Members I welcome here on your behalf, will have the courage to do so in a scientific spirit and will not be frightened by the cry of the Hindu law of inheritance or vested interests being in danger. The problem of the sub-division of agricultural holdings, though a very difficult one, has been fairly successfully tackled in some Provinces, and if Economists, social reformers and other political leaders give a definite lead both to Government and the public in this matter, it is not incapable of solution in other Provinces as well. Our duty as Economists does not end here, but it extends to an examination of the several causes which prevent full advantage being taken of the fertility of the soil. So long as our agriculturists are poor, are heavily indebted, and do not enjoy the necessary financial assistance for land development or agricultural improvements, it is not possible for them to get more from the land than what they do at present. The Co-operative Movement which was started some twenty years back, is trying to help in providing money to the members of Co-operative Credit Societies mainly for ordinary agricultural operations at fair rates of interest. But it has after twenty years touched only a fringe of the problem and can do but little more unless Government see their way to start a State Co-operative Bank for providing cheap long-term capital to the existing Provincial Banks in the various Provinces.

So long as land revenue forms a very large percentage of the Provincial revenues, it is the duty of these Governments to adopt a policy of improving the economic, social and intellectual condition of those who live on the land and pay out of its proceeds. Unfortunately, till very recently, Government have followed the *laissez faire* policy of British statesmen and administrators as regards agricultural as well as other industries and as a result things were allowed to drift, agriculturists being left entirely at the mercy of the village money-lender regarding financial facilities both for current agricultural expenses and for improving the land. The great famine of 1899-1900 was an eye-opener and some of these Governments have since then adopted various measures to help the agriculturists and provide scientific agricultural education to enable people to introduce modern and scientific methods of cultivation. While thankfully acknowledging what has been done in this direction, one cannot help saying that the needs of agriculture and agriculturists are not fully realised by high Government officials on the heights of Simla or the plains of Delhi. Even when men who have come in touch with agriculturists as district officers are transplanted to these heights, they very soon forget their old friends, for "out of sight out of mind" applies in this case as in many others. If high Government officials had understood their duties to agriculturists, they would not have opposed the amendment to the Imperial Bank Act which wanted to empower the Bank to extend to Co-operative banks, the facilities which it was authorized to grant to joint-stock banks. So long as this attitude towards agriculturists continues and there is no change in the mentality of the men in charge of money-power at head-quarters, there is no possibility of any appreciable advance in the condition of agriculture and no chance of agriculturists getting from the soil what their brethren do in other advanced countries. I know this is Politics and not Economics, but I cannot help referring to the policy of Government in so far as it trenches on and affects the economic development of the country. Talking of the general policy of Government towards agriculturists, one cannot fail to mention the existing heavy indebtedness of agriculturists and the necessity of adopting measures, both legal and financial, to eradicate this evil as far as it is possible to do so. The establishment of land mortgage banks, somewhat on the lines of the Landschaften of Germany, and of conciliation boards with power to examine into old accounts of the Sowcars are some of the measures that suggest themselves to me as likely to prove useful if debt redemption is to be taken up on a systematic basis. Before passing on to other subjects, I desire to urge both Government and Legislative bodies to use the villagers' money in improving villages and not in beautifying district towns, or Provincial capitals, or the Imperial City of Delhi. Let them bear in mind that the villages have the first claim on the money raised from the land and that to spend the same on land is also economically a sound proposition

One of the results of the adoption of any policy aiming at the prevention of sub-division and fragmentation of lands will be to reduce the number of persons dependent on the land and thus to increase unemployment in villages. Two remedies suggest themselves to me, namely, the development of cottage industries and the drawing of those who are in need of employment to industrial areas, or to such agricultural areas as require more men than are available to that locality for intensive cultivation. While Colonial Governments of Ceylon, the Federated Malaya States, Mauritius and even British Guiana spend money on immigration agencies for the purpose of recruiting unskilled labour, no systematic attempt of this kind has been made by any Indian Provincial Government, except that of

Assam in the interest of tea plantations. At present, excepting the statistics prepared by the Bombay Labour Office, there are no regular and exact figures of unemployment in the Provinces. The first necessity is the preparation and publication of such statistics. The Industries Departments must then, in consultation with District Officers and the Co-operative Department, find out how many of these people can be employed by the development of the old and the starting of new cottage industries. When this work is done they will be in a position to know the number of men for whom provision has to be made outside the villages, either in their own Provinces or in others. If there is co-ordination between Provinces, it will not be difficult for any Province to find employment for its unemployed in other Provinces. It is only after all efforts have been made to find work for the unemployed in our own country that we can think of emigration to other colonies as a remedy for unemployment. I refer here to the economic side of emigration only, as the political side can well be left for the decision of the Committee of the Central Legislature appointed under the Emigration Act.

While the problem of unemployment in reference to unskilled labour does not appear on the face of it to be very difficult of solution, the problem of the unemployment of the middle and the lower middle classes requires very careful consideration to enable correct remedies being devised. The educational policy of Government is to a certain extent responsible for creating or increasing the number of this class of unemployed, and while one feels the necessity of modifying and recasting the entire system of education, one would not be justified to say off-hand as to how and to what extent the policy should be modified. Industrialization on a very large scale, with State aid wherever necessary, and the establishment of a large number of technical schools with a technical institute at their head, have been looked upon as two measures which are likely to meet the needs of the large number of educated and semi-educated young men of the middle class who find difficulty in obtaining suitable employment. This evil of unemployment will go on increasing unless industrialists, politicians, educationists and Government join hands and make an earnest effort to find out the remedies and adopt a bold policy of economic reconstruction

Although the necessity for industrialization has been preached from all platforms and also in the Press, and by none so consistently and ably as by the distinguished President of last year's Conference, Government have, till very recently, closed their ears to all such appeals. As a result, excepting the cotton industry in Bombay and the jute industry in Bengal, no large industry has been able to face foreign competition. The Government of India have imitated and carried out the orthodox Free Trade policy of Britain forgetting that India's industries were wholly unorganized in the modern sense. John Stuart Mill's dictum about the necessity of protecting *infant* industries was completely ignored, and even when Government appointed the Indian Industries Commission, the terms of reference did not include an inquiry into the tariff policy of the Government. It was only after a policy of Protection was adopted by Britain during the War that the eyes of Government were opened to the necessity of similar action being taken in this country, and the Montagu-Chelmsford Report frankly acknowledged that the majority of educated opinion in India was in favour of Protection and that Britain could not stand in the way of India's industrial progress. The appointment of the Fiscal Commission was the first tangible result of this change in the angle of vision. A long time, however, elapsed before the recommendations of that Commission were carried into effect and as a result of this delay the premier iron and steel industry in the country is to-day in a precarious condition. Unless Government are more responsive to the industrial needs of the country and show greater active sympathy towards new and infant industries, it is impossible to secure sound and rapid progress in the industrial development of the country. That a sympathetic Provincial Government can do a great deal towards assisting struggling new industries will be seen by studying what the Bihar Government and their Director of Industries with his Board have been able to do in this direction.

Protection, whether in the form of import duties or bounties and even State aid, cannot and will not by themselves bring about the industrialization of the country. Th first requisite for the establishment of industries is an interprizing spirit. This spirit is not entirely absent from our country as can be seen from the industries already started by us. The strength of this spirit is in a sense a barometer of success or failure of new industries, and if the industries at present struggling for existence come out successfully through their present trials, we are sure to see a considerable strengthening of the enterprizing spirit amongst our country-men. Another difficulty in the way of the establishment of new industries is the absence of trained and well-qualified men to work them. The establishment of technological institutes in the Provinces for training men for industries that could suitably be started in these Provinces appears to be an ideal solution. This, however, means both time and money. I would suggest that till such institutions are established, the various Local Governments should send out students, not one or two, but by dozens and scores, to various countries to receive such theoretical and practical training as will enable them to handle local organised industries on their return. This, of course, will be only a temporary remedy, but it is a necessary one during the period of transition. Let us hope that the various Governments and Legislative Councils will pay earnest attention to this question and create a large number of scholarships till suitable technological institutes are established in the Provinces.

The industrial development of a country depends to a very great extent on the banking facilities that the industries can obtain. In this country there are three different classes of banks over and above private firms of bankers or shroffs, namely, (1) the Imperial Bank of India formed by the amalgamation of the old Presidency Banks, (2) the Exchange Banks, and (3) Indian Joint Stock Banks. None of these is in a position to work as an industrial bank, and the one bank that was started with that object in view has been obliged to stop business and amalgamate itself with an existing commercial bank, owing to circumstances over which the promoters had no control. The need for a special type of bank to finance new industries was recognized by the Industrial Commission. After referring to the work done by industrial banks in Germany and Japan, they observe: "We have shown that the lack of financial facilities is at present one of the most serious difficulties in the way of the extension of Indian industries, and we believe that industrial banks, especially under the improved conditions towards which the measures proposed by us are intended to lead, would be a potent means of removing these difficulties and of affording help to industrialists." Further on, they say, "we ask, therefore, for the appointment at the earliest possible date of an expert Committee to consider what additional banking facilities are necessary for the initial and for the current finance of industries, what form of Government assistance or control will be required to ensure their extension on sound lines as widely as possible throughout the country and whether they should be of Provincial or Imperial scope or whether both these forms might not be combined in a group of institutions working together." As Government did not take any action on this recommendation for some four years, Professor Kale moved a resolution in the Council of State recommending the appointment of such a Committee. That resolution was accepted by the Council, and yet Government have not, for two years, taken any action in the matter. Is it any wonder if, such being our usual experience, we industrialists and business-men begin to think that Government, as constituted at present, is not in sympathy with the movement for industrialising the country, and that unless it becomes responsible and responsive to public opinion, we can expect very little from it? I fear I am drifting into politics and shall not, therefore, say anything more on the subject.

It is a well-known fact that there is scarcity of floating capital in this country during the so-called busy season, that is, when the export trade in agricultural products is brisk and when large sums of money are required to finance the purchase of these products. This difficulty hampers trade and adversely affects the economic situation in some of the Provinces. Temporary inflation of currency is one remedy and is sometimes resorted to. The other remedy which has so often been pressed upon the attention of Government is the transfer to this country from England of India's balances under whatever heads they may stand in Government's account books. If this suggestion is carried out, it will not only ease the Money Market during the busy season, but this extra money will be of very great use to commerce and industries during the whole year. This money will be able to earn a higher rate of interest in India than what it gets in England, and will thus increase the income under the head 'Interest' of the Government of India. It is difficult to understand why Government have not accepted this proposal which has been pressed on their attention by individual Indians as well as by Indian business associations for a number of years.

Another method that would lead to the increase of working capital for commerce and industry is the practising of private and public economy and thus increasing savings under both heads. During the present times of trade depression and slump in the money market, an appeal for private economy is hardly necessary, for many of us who might have been extravagant during the boom period feel the necessity of severe economy to make both ends meet. A great deal, however, still remains to be done as regards economy in public administration, and we all earnestly hope and wish that the Central and Provincial Governments will reduce their recurring and non-recurring expenditure and will try to bring down their total expenditure somewhere near its pre-War level. I believe that such retrenchment can be effected without undermining the efficiency of administration or without any cuts in the expenditure on what are commonly called " nation-building departments." If this kind of economy is carried out in public administration, we shall soon find our Finance Members in the happy position of not only having balanced budgets but also being able to reduce taxation. While the adoption of such measures will take a long time to bear fruition, the work of examining into the incidence of the present system of taxation and recommending a readjustment of taxation on a scientific basis has been entrusted to the Taxation Committee by the Government of India. At the session of the Legislative Assembly held after the appointment of this Committee was announced, a resolution was moved asking for the appointment of an Economic Inquiry Committee. This resolution, in an amended form suggesting also the dissolution of the Taxation Committee, was carried by a majority of the House, against the wishes of Government. No action has till now been taken on this resolution and the Taxation Committee have begun their work and issued their questionnaire which extends over almost all aspects of taxation, but does not include any questions relating to an economic inquiry. When our Association selected subjects for the writing of Papers and for discussion thereon, they realized that the recommendations of this Committee will very largely affect the economic condition of the various classes of the population and they, therefore, put this item first on their Agenda The Taxation Committee have come here to listen to our discussion of these subjects, and I am confident the Economists, assembled in this Conference, will throw a great deal of light on the various problems raised in the questionnaire.

While the second item on our Agenda falls partly within the scope of the Taxation Committee's inquiry, it will form the main part of the work of the Economic Inquiry Committee which, I hope, Government will soon appoint as desired by the Legislative Assembly In this connection, it gives me very great pleasure to note that Prof. Shah, Professor of Economics, Bombay University, and his studious collaborator, Mr. Khambhata, have collected almost all available information on the subject and after trying to arrive at figures about certain items for which no statistics are available, published their results in the form of a book, the " Wealth and Taxable Capacity of India." Here is very good spade work done by independent workers in the field of economics, which will prove very useful to any Committee that may be appointed by Government to inquire into the economic condition of the country. Although most of us want such an inquiry, we do not want it for the same reasons nor are we agreed as to how to conduct the work. As regards the former, each one wants it because he thinks its results will justify his preconceived notions about the country's economic condition. My object in asking for such an inquiry is that after its results are known, it will be easier to suggest means for improving the condition of the economically backward classes. As regards the methods of enquiry, I think that Government should appoint a Committee, of say two Economists who have done similar work and two public men who have given serious thought to the subject, to examine all available sources of information and then lay down lines of work for checking the data and for collecting information on subjects for which no data are available. When the lines laid in the Committee's report for such work are approved of by the Central and the Provincial Governments, in consultation with the Standing Finance Committees of their Legislatures, the Government of India should appoint a representative Committee to carry on the inquiry, giving the Committee power to co-opt members from the Provinces.

The subject of the financial relations between the Central and Provincial Government has been so-often discussed in the Central and Provincial Legislative bodies and the different view-points have been so forcibly expressed by the representatives, both official and non-official, of each that I have practically nothing more to add to what has already been said in the Councils and also sometimes on public platforms. Moreover, as each Province holds strong views on the injustice done to it by the Meston award, I think it but fair not to give voice to the Bombay view-point from the Presidential Chair at an All-India Conference.

Before I refer to the last item on the Agenda—Item No. 4, I have already referred to when speaking about the financial requirements of industries—I would like to place before you for your consideration my views about the work that lies before the Foreign Capital Restrictions Committee. When the Steel Protection Bill was being considered in the Assembly, some members gave expression to the fear that foreign capitalists will take advantage of the situation created by the imposition of new duties and start concerns here to manufacture steel and take all the benefits arising from these duties and indirectly prevent the utilization of Indian money and Indian talent. Reference was made to provisions in the British State Aid to Industries Act to prevent foreign capital taking advantage of the concessions granted under the Act and amendments were moved in the Assembly on similar lines. All these amendments were withdrawn in favour of one moved by Pandit Motilal Nehru after the Commerce Member gave an undertaking that Government will appoint a Committee to consider the question in all its bearings. That Committee, consisting of elected members of both Houses of Central Legislature and of the Commerce and Finance Members of the Government of India, has been appointed and has just begun its work. The matter, is a very important one as the recommendations of the Committee will have a very great effect on the future industrial development of the country. The Indian Fiscal Commission after hearing witnesses on this question and after discussing the matter could not come to any unanimous decision on the subject. The majority opinion is in favour of the free flow of foreign capital for industries where no special concessions are granted, and of slight restrictions where such concessions are granted ; the minority, including the President, the Hon. Sir Ibrahim Rahimtoola, want definite restrictions being imposed in all cases. Prof. Coyaji, one of the members of the majority, has in his lecture on the subject at the Patna University quoted various economic authorities in favour of allowing foreign capital to come in without any restriction. Equally competent Economists, in my Presidency, feel strongly that such an inflow is economically injurious to the best interests of the country. I do not propose to discuss the question from a theoretical point of view but want to put forward my views from a practical standpoint. That our country is poor and its accumulated wealth is very small compared to the wealth of other countries is a well recognized fact. It is also well-known that this wealth, little as it is, is spread over such a large area and distributed amongst so many people—excepting of course a few Indian Princess and big Zamindars—that it is very difficult to draw money from one Province to another. As a result of these circumstances, it is very often difficult to start large but sound industrial concerns without borrowing money from outside. The Tata Iron and Steel Company had to borrow from outside in the form of debentures and many other companies have to do the same. The question for solution is, therefore, whether the establishment of new large industries should be postponed till we get money within the country, either from individuals or from Government, or whether we should borrow foreign capital on our own terms? Speaking for myself, I am in favour of borrowing from outside at fair market rates of interest on condition that the borrowed capital does not became the master of the concern in whose interest it is borrowed. If the price asked for lending the money includes control I would not pay that price.

The Mercantile Marine Committee which was appointed by Government in accordance with the resolution of Sir Sivaswami Iyer moved in and accepted by the Legislative Assembly, submitted its Report some nine months back. I was a member of that Committee and would like to place on record my Indian colleagues' and my appreciation of the fairness of the attitude adopted by the Chairman, Captain Headlam, and Sir John Biles in the examination of the various questions that came up before the Committee as also to their sympathy towards India's aspirations to have her own Mercantile Marine. The item on the Agenda about the creation of an Indian

Mercantile Marine was put there to enable Economists to find out the amount of economic drain suffered by the country on account of all her ocean traffic—both passenger and freight—being carried in non-Indian ships. In the evidence given before the Committee this drain was put at 30 crores of rupees by one witness while another witness said it varied from 20 to 70 crores from the pre-War times to the post-War period. Mr. Findlay Shirras says : " The total expenditure for shipping services may accordingly be taken at 22-15 crores." Mr. S. N. Haji puts down the gross earnings of the mercantile marine engaged in Indian trade at 57.08 crores. Probably one of the reasons for this is that while one Economist gives the net drain to the country the other gives the gross figure. Mr. Haji has made his calculations on three different bases and arrives at practically the same results. It is for you Economists to study the systems adopted by each authority, check the figures, and give us and the public your results.

Although we can not expect to benefit in the near future by the results of our discussions at this Conference, I am hopeful that if we all—business-men, economists, and also leaders of public thought in other fields—combine to work continuously, systematically, and whole-heartedly for the economic development of the country, we may see the rate of progress to be more rapid than it has been in the past. Ours is but to work, the rest lies in Higher Hands.—

> " So, take and use Thy work :
> Amend what flaws may lurk,
> What strain o'the stuff, what warpings past the aim !
> My times be in Thy hand !
> Perfect the cup as planned ! "

THE GROWTH OF TAXATION IN RELATION TO POPULATION AND PRICES.

BY

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In discussing the Indian tax system in relation to its incidence and possible modification, it is desirable to start with a consideration of the growth of revenue as a whole and of taxation proper in recent times. It is obvious that a mere statement of the revenue collected by the Government over a series of years expressed in terms of money will possess little significance. Such figures must be related to the number of persons from whom the revenue is obtained and to the movement of prices in order that some idea may be formed of the average real wealth which has been taken from the tax-payers.

Revenue in relation to population and prices.

Total Revenue in lakhs of rupees.		Population of British India (1,000).		Revenue per head.	Revenue per head corrected for price change.
Average for—	Lakhs.				
1	2	3		4	5
				Rs.	
1898-09 to 1902-03 ..	109·58	231·259	(1901) ..	4·7	..
1908-09 to 1912-13 ..	144·33	243·933	(1911) ..	5·9	4·9
1918-19 to 1919-20 ..	234·41	247·003	(1921) ..	9·5	4·1
1923-24	209·98	249·470	(1923) ..	8·4	4·2

(The revenue for 1923-24 is taken from the Budget Estimates for Central and Provincial revenue for that year. The figures for previous years are taken from Statistics of British India, Volume no. 1624. The population for 1923 is estimated on the assumption of an annual growth since 1921 of 1 per cent. I have calculated that between 1900 and the second period taken above prices rose 20 per cent.; between the first and third periods 130 per cent.; and between the first and last period by 100 per cent.)

The chief difficulty in correcting the growth of revenue for changes in the general level of prices is due to the many problems attaching to the construction of a reliable price Index Number.

I have examined the material available on the subject of Indian prices since 1900 and, although the price statistics are admittedly unsatisfactory in various ways, there appears to be sufficient data for asserting that between 1900 and 1920 there was a general price rise of some 130 per cent. The outstanding feature of the Indian price movement in recent years was the very great rise that took place during the last three or four years of this period. Since 1920 there has been a reaction and the present price level may for purposes of general reasoning be placed at approximately 100 per cent. above the level at the beginning of the century.

In order to interpret the real growth of revenue in terms of the goods and services consumed by the Government it is necessary to allow, not only for the rise in the price of commodities, but for the change in wages and salaries of the labour employed also. From the volume on "Prices and Wages" published by the Department of Statistics I have estimated that between 1900 and 1920 the general rise of wages was approximately 95 per cent. From these statistics it would seem that the wages of unskilled labourers have risen in a greater degree than those of skilled workers and this conclusion is in accordance with the predominant evidence from other sources. There would seem to be ground for believing that wages paid in Government employment have risen somewhat more than those in private employment. On the other hand, the movement of salaries for the higher grades of Government employees certainly did not keep pace with the movement in general prices to anything like the same extent.

It will be seen that the revenue per head during the period 1918-20 was, as corrected for growth of population and rise of prices, slightly lower than in the pre-war period. In so far as wages and salaries did not rise in the same proportion as prices Government gained as a consumer of labour and its real revenue was thus somewhat higher than is indicated. Since 1920 although prices have fallen, wages and salaries have risen. Thus it may be said that at the present time the real goods and services consumed by the State through the expenditure of its revenue are approximately the same as in the period 1908-13.

It is not difficult to see in these figures an explanation of the inability of Government during the years of rapidly rising prices to balance the budget. The expansion of expenditure to which the war gave rise was met only to a small extent by an increase of real revenue. The deficit was obtained by a large recourse to loans.

In stating that the real revenue was approximately Rs. 4·2 in 1924-25 as against Rs. 4·7 at the beginning of the century it does not, of course, imply that the real burden to the tax-payer has fallen, since it does not follow that the capacity to pay has continued constant. This constitutes a problem to be separately examined.

Growth of the constituent elements in the Revenue system.

During the present century the Indian revenue system has undergone a very considerable change. It may still be said to rest on the old framework, inherited from the Mughal period, when the land revenue, the royal monopolies, and the abkari taxes formed the principal sources from which the state obtained its funds. During the first half of the nineteenth century the chief modifications of the tax system consisted in getting rid of the worst remaining elements of the pre-British revenue that survived the abolition of the sair duties, such as the transit duties and the discriminatory sea-customs duties. During the remainder of the last century little important modification was made. An important new principle was established with the introduction of the assessed taxes which, however, left the actual-revenue but little affected. The customs duties were varied within comparatively narrow limits in response to financial necessities and the niceties of free trade theory. It has been left for the administrators of the present century under the three-fold influence of a great rise of prices, the exigencies of war, and a wider conception of the responsibilities of the state in regard to economic development, to graft upon the old and largely inelastic revenue system the most readily available means for enhancing the Government receipts. The nature and extent of these changes may be briefly presented.

A.—THE LAND REVENUE

The net land revenue (i.e., deducting the irrigation charges that are in some places collected as part of land revenue) during the present century has increased as follows :—

Average for

1900-01.	1907-09.	1919-20.
Rs.	Rs.	Rs.
25·25.	28·88	33·91.

An increase of 34 per cent.

In order to obtain a true idea of the movement of land revenue these figures need correction for several factors. The first is the rise in prices. If the index of the price rise between 1900 and 1920 be taken as 100 : 230 then a land revenue of Rs. 25·25 in 1900 would, other things being equal, be equivalent to a revenue of Rs. (lakhs) 58·07 in 1920. The fact that the actual land revenue in 1920 was only Rs (lakhs) : 3·91 was thus tantamount to a reduction of nearly 42 per cent.

This very important effect of the general rise of prices has not, of course, been felt evenly in the different Provinces. About one-fourth of the cultivated area in British India is permanently settled and the landlords of these permanently settled areas have gained most. In the temporarily settled areas the increase of land revenue has come about chiefly in those places which have gained from an extension of cultivation, such as the Punjab and Lower Burma. In the more fully developed agricultural areas, even under raiyatwari settlement, the enhancement of land revenue per cultivated acre has been almost negligible during the period through which prices have been rising fast. In calculating the extent of the real modification in the land revenue during the past quarter of a century account must be taken of other factors besides the movement of prices. The extension of railways tends both to reduce the expenses of cultivation and of marketing the produce. Since 1900 the railway mileage has increased from less than 25,000 miles to over 37,000 miles. The whole benefit of this development has not been transferred to the consumer, but has in many cases imparted an increased differential value to the lands served by the railways. Since 1900 the irrigated area has increased from 32 million acres to 48 million acres in 1920. Some part of the benefit derived from this increase of irrigation is represented by the increase of irrigation revenue, but there is a substantial margin left to the holder of irrigated lands. The net area sown with crops in British India has increased from an average of 202 million acres in 1901-03 to 217 million acres for 1919-21. Thus it is clear that if allowance were made for the extension in transport facilities, in irrigation, and in cropped area a considerable increase must have taken place in the rental value of land which is equivalent to a further reduction of the burden of land revenue over and above that allowed for in the rise of prices.

B.—FORESTS.

In the Indian public accounts the revenue from forests is classified under the same general head as that from land revenue. In reality the income is of a composite character, but nearly four-fifths of the gross forest revenue is derived from the sale of timber. The Forest departments are becoming and should be still further regarded as commercial departments in the same category as the railways. The accounts relative to these commercial activities should be separately kept. As a revenue-earning department the comparative position since the beginning of the century is briefly as follows :—

——	Forest area square miles.	Gross revenue lakhs.	Net revenue lakhs.	Increase of net revenue per cent.
		Rs.	Rs.	Rs.
1900-01 ..	208,369	197	86	..
1919 20 ..	250,949	536	219	154 per cent.

It will be seen that the net revenue from forest property has increased rather more than in proportion to the rise of prices and, with progressive management, it is certainly capable of becoming more productive. The distribution of forest revenue between the several Provinces is very unequal. In 1920-21 the gross revenue from forests in Burma was 221 lakhs, while in Bengal and Bihar and Orissa it was 18 and 9 lakhs respectively.

C.—OPIUM.

The opium monopoly, from having been by far the most important source of revenue second to the income from land, has at the present time become comparatively unimportant. In the quinquennium 1877-81 the gross revenue from opium amounted to 17 per cent. of the total receipts in British India. In 1919-20 it was only 3·1 per cent. The opium revenue should be divided under the two heads, taxation and tribute. The following table will show the change in regard to this source of revenue during the twenty years 1900 20 :—

—	Gross receipts lakhs.	Net revenue lakhs.	Quantity exported chests.	Sale value lakhs.	Quantity provision opium chests.	Quantity excise opium chests.	Average price per chest.
	Rs.	Rs.		Rs.			Rs.
1900-01	765	197	60,708	945	44,457	4,517	1,360
1919-20	455	325	11,359	291	7,400	8,138	3,140

The figures in columns 3 and 4 are for total exports and include Malwa opium. The sale values in column 4 are thus not comparable to the gross receipts in column 1.

From the data given it may be roughly calculated that in 1900 India obtained as tribute for its opium a sum of about 3¾ crores of rupees, while in 1920 it received only some 1½ crores. The taxation in respect of opium may be put roughly at about 1¾ crores in the latter year.

D.—SALT.

A comparison between the revenue from the salt tax in 1900 and in 1920 may be suggested by the following table :—

——	Salt duty	Salt duty per head.	Quantity consumed per head.	Salt duty corrected for charge of prices and population.
1	2	3	4	5
	Lakhs Rs.	Rs.	Seers.	
1900 01 ..	875	·370	6·2	A salt duty of 875 lakhs rupees allowing for the growth of population and for a hundred per cent. rise in prices would be equivalent to a collection 1840 lakhs in 1924-25.
1919-20 ..	529	·217	8·1	
1924 25 ..	10,54	·434	..	

The salt duty in 1900-01 was levied at the rate of Rs. 2-8 per maund, the rate to which the duty was restored in 1923-24. Allowing for the change in the purchasing power of money the present rate is equivalent to a rate of Re. 1-4 in 1900.

E.—STAMPS.

The revenue from stamps, judicial and non-judicial, has increased as follows :—

1900-01	1919-20	1923-24.
Lakhs Rs.	Lakhs Rs.	Lakhs Rs.
501	1192	1364.

(the figures for 1923-24 is the Budget Estimate including both Central and Provincial receipts under this head).

While the revenue from judicial stamps doubled during the first twenty years of the present century, that from non-judicial increased three-fold. Thus the first approximately kept pace with the rise of prices, while the second represented a real increase of revenue.

F.—EXCISE.

The following figures show the expansion of the excise revenue excluding the opium excise:—

1900-01	1919-20	1923-24 B. E.
Lakhs Rs.	Lakhs Rs.	Lakhs Rs.
4·88	16·59	19·13

Allowing for the movement of population and prices there has been a real increase of revenue between 1900 and 1923-24 of approximately 88 per cent

G.—CUSTOMS.

During the war period India virtually passed from the character of a free trade country with a low tariff for revenue to that of a country with a tariff imposed with the double purpose of giving protection and yielding a high revenue. The great expansion in the receipts that has followed this change of policy is reflected in the figures :—

Average 5 years ending—

	1900-01	1919-20	1924-25 B. E.
	Lakhs Rs.	Lakhs Rs.	Lakhs Rs.
Imports ..	391	1543	
Exports ..	87	481	
Total ..	478	2024	4501

The nominal increase in the income from customs duties is thus seen to be not far short of ten-fold and the revenue from this source is now far above that from land revenue which until comparatively recently yielded nearly half the total receipts of Government. Even allowing for the increase of population and prices the customs revenue has risen by not far short of five-fold. This constitutes nothing short of a fiscal revolution and upon the customs revenue has been placed the lion's share of the burden in making up for the great fall, due to the rise of prices, in the revenue from land, and the monopoly taxes.

H.—INCOME-TAX.

The growth of income-tax during the period here considered has been as follows :—

1900-01	1919-20	1924-25 B. E.
Lakhs Rs.	Lakhs Rs.	Lakhs Rs.
196	2320	1821

This shows a nominal increase of over nine-fold and a real increase, allowing for population and prices, of four-fold, between 1900 and 1924-25.

I.—TRIBUTE FROM INDIAN STATES.

The small revenue from this source varies very little from year to year. It was as under :—

1900-01	1919-20
Lakhs Rs.	Lakhs Rs.
86	93

If this tribute had increased proportionately with the rise of prices it would have amounted to Rs. 197 lakhs in 1919-20.

The result of the consideration of the principal heads of revenue in relation to the movement of prices and population between 1900 and 1920 may be summed up as follows :—

Revenue.	Actual 1900-01.	Actual 1919-20.	Corrected 1919-20.	Nature of correction.	Deficit or surplus lakhs.
Land Revenue net ..	25·25	33·91	62·37	For price rise and net sown areas.	—28·46
Forest . ..	·86	2·19	1·97	For price rise ..	·32
Opium	4·97	3·25	11·43	Ditto ..	—8·18
Salt	8·75	5·29	21·16	For price rise and population. ..	—15·87
Stamps	5·01	11·92	12·30	Ditto ..	—·38
Excise	1·88	16·59	12·00	Ditto ..	4·59
Customs	1·78	20·24	11·56	Ditto ..	8·68
Income tax ..	1·96	23·20	4·80	Ditto ..	18·40
Tribute	·86	·93	1·97	For price rise ..	—1·04

The balance arrived at by this comparison between the actual revenue obtained from the principal sources of State income in 1900-01 and the revenue which would have been a true equivalent in 1919-20 as against the revenue actually collected in the latter year shows a total deficit of Rs. 21·94 lakhs despite the great increase of customs revenue and income-tax (including excess profits tax). Thus the services of the State could not have been maintained at the earlier level unless the revenue had been supplemented by increased receipts from other sources These resources were principally obtained from borrowing and from the profits obtained from the Commercial Services.

There remain to be considered certain other forms of revenue. The most important are those commonly classified under the head of Commercial Services.

The three heads of revenue commonly classified as Commercial Services are Railways, Posts and Telegraphs and Irrigation. It has already been suggested that the major part of the revenue from Forests should be similarly classified.

The receipts under the head of Commercial Services, as they appear in the public accounts, exaggerate the total of public revenue beyond the true ammount. In the case of the railways the gross earnings, less working expenses and the profits and subsidies of private companies, are treated as net earnings forming part of the public revenue. Under public expenditure is included the payment in respect of interest and sinking fund on railway capital. Thus in 1919-20 the revenue from railways was stated in the accounts as Rs. 31·83 lakhs. But against this Rs. 17·93 lakhs was included under the head of public expenditure on account of interest and other charges. The real addition to the revenue from the railway service was thus Rs. 13·90 lakhs. In the case of the Posts and Telegraphs and Irrigation Services the gross receipts were entered as public revenue and the gross expenditure appeared as a contrary payment under public expenditure. (In the case of Posts and Telegraphs a change has recently been introduced by which the working expenses are deducted from gross receipts and the balance only now appears as revenue.) In 1919-20 the revenue under these heads was given as Rs. 9·20 lakhs and Rs. 8·74 lakhs respectively. After deducting the .expenditure, the real additions to revenue from these services were Rs. 2·07 lakhs and Rs. 2·3 lakhs. It may be noticed that in consequence of the change in mode of stating the revenue from Posts and Telegraphs the revenue for 1923-24 appears as less by over Rs. 8 crores than would have been the case had the old method been retained. The following table shows the revenue at four periods in the present century, distinguishing the income from the principal heads of revenue, the Commercial Services, and other revenue sources. In brackets are given the true net receipts from Commercial Services and the total revenue calculated in this way:—

Revenue from	1900-01.	1910-11.	1919-20.	1923-24.
1	2	3	4	5
	Lakhs.	Lakhs.	Lakhs.	Lakhs.
Principal heads	67·94	82·56	127·52	149·68
Commercial services	34·65	30·40	49·79	39·87
	(1·21)	(4·00)	(18·67)	(5·28)
Other sources	10·30	7·59	18·29	18·02
Total	112·89	120·55	195·60	207·57
	(79·45)	(94·15)	(164·48)	(172·98)
	Rs.	Rs.	Rs.	Rs.
Revenue per head on basis of net receipts from Commercial services.	3·4	3·8	6·6	6·0

From the table given above it will be seen that, while in 1919-20 the revenue derived from the principal heads had not kept pace with the rise of prices and the increase of population since 1900-01, the additions to taxation during the last three years have rather more than restored the balance. The results obtained from the Commercial Services as they are stated in the public accounts would appear to have deteriorated when allowance is made for price changes and the conclusion might be drawn that the prices charged in respect of these services had not been sufficiently enhanced. The net receipts under this head for 1923-24, as has already been noticed, appear as less by Rs. 8 crores than they would have done save for the change in the system of account. Even allowing for this it is evident that the revenue from the Commercial Services (as ordinarily stated), has very far from kept pace with the change in the purchasing power of money. Whether it should so change raises important questions of principle. In so far as a Commercial Service yields a surplus after all expenses have been paid, including interest on capital, it is an instrument of taxation. If it is proper that it should be so used it follows that the tax revenue should increase in the same proportion as general prices. If it fails to do so there is a remission of taxation. But it is evident that the measure of taxation involved in the revenue from Commercial Services is not properly stated in the figures of revenue receipts as given in the public accounts and it would thus be quite improper to expect that these should show an increase proportionate to the rise in prices. Whether or no the receipts from Commercial Services show an adequate advance cannot be answered without reference to each service in particular. A part from such considerations as increasing or decreasing efficiency of management, which will affect the financial result, it would seem clear that it is not in accordance with sound principles of taxation that services such as the posts and telegraphs, or the railways, should be made to yield a tax revenue. Where, however, capital has been invested in the past in productive undertakings, supplied, not from loan, but from revenue, the State would be justified in reaping a surplus equivalent to the current rate of interest on such capital. Such surplus should not be treated as a tax on the present users of the services. In the case of State irrigation works it will probably be the case that the supply of water increases the capacity of the user to bear taxation. The measure of the surplus value due to the irrigation will be directly affected by a change in price level. Irrigation rates should therefore be raised, not in proportion to the rise in the expenses of irrigation, but in relation to the enhanced value of the produce resulting.

Certain questions of interest arise in connection with the various items of revenue which I have grouped under the head of "Other sources". In a large number of cases these represent merely book transactions and not any collections from the public. To this extent they should be deducted from the total revenue in order to obtain the true amount of taxation. In the revised budget estimate for 1923-24 a sum of Rs. 324 lakhs was included in the revenue to be derived from interest. In the same year Rs. 294 lakhs were included for revenue under the head of currency. It is clear that interest receipts represent a gross income from the employment of the proceeds from former revenue. It might be argued that such funds, if they had not been taken from the tax-payers, could have been employed to yield interest for private persons and that, therefore, the interest obtained by the State, no less than the principal, should be regarded as a tax. But if this method of argument is adopted it must be applied to all forms of taxation and the calculation of the real amount of taxation would thus include compound interest for all periods subsequent to the time of its original collection. Such a contention seems so fantastic that it need not even be mentioned were it not for the fact that it has been actually advanced and accepted in another connection, namely, in the calculation of the amount of the so-called "drain." Revenue from interest can only be treated as a real deduction from taxation that would otherwise have been necessary.

The revenue from exchange and currency is not so simply dealt with. Gain from exchange that arises from the fact that Government has estimated the cost of certain foreign remittances at an amount greater than is actually needed is obviously a mere book transaction. It does not represent any real contribution either by the tax-payers or as a tribute from abroad. But Government may also be, in effect, a considerable exchange banker and make a real profit from the use of its funds in buying and selling exchange. If the State possessed a monopoly of such exchange business it might obtain a monopoly revenue from the members of the community which would properly be classed as a tax. Any other gain is likely to approximate to an interest upon the use of its balances and, like interest proper, constitutes a commercial income to be treated as a deduction from the amount of taxation otherwise needed.

As a result of the analysis of the revenue that has been made we may now make an approximate estimate of the amount of taxation per head in British India for the year 1923-24. I make no attempt to estimate the amount of the customs duties that, if an exact analysis were possible, we could include as foreign tribute and to that extent a deduction from taxation, although there is little doubt that in recent years India has received some tribute of this kind Taking the amount of the revenue under the principal heads, viz., Rs. 149·68 lakhs, I deduct 1½ crores as Opium tribute; 2 crores for the sale of timber; 87 lakhs for tribute from Indian States; making 4·37 lakhs. There is, as I have explained, a difficulty in assigning the gain from railways. In 1923-24 it amounted to 5·28 lakhs. I propose to regard it as entirely interest on past investments from revenue There was in this year a net loss on the working of Posts and Telegraphs The revenue from "Other sources" I omit as either book transactions or contributions to revenue other than taxation. There remains the question of classifying land revenue and the surplus income from irrigation. In the case of irrigation works, if they are regarded as commercial undertakings, it is clearly improper to arrive at an estimate of profit by deducting the loss from the unprofitable undertakings from the profits of those that are profitable. Each undertaking should be treated separately. Those that are unprofitable involve a tax burden. Those that yield a surplus above expenses and interest tax the users in the same way as any other monopoly service. Thus the total of surplus profits without deducting losses should be treated as taxation. I have not seen the accounts for 1923-24, but in 1920-21 the total surplus profits were 411 lakhs.

Thus the final position would be approximately as follows :—

1. Income from principal heads of—

	Rs.
Revenue in 1923-24	149·68 lakhs.
Deduct Tribute	2·37 ,,
Total . .	147·31

2. Surplus income from Commercial Services, treated as taxation

	Rs.
(*a*) Railways	5·28 lakhs
(*b*) Irrigation (1920-21)	4·11 ,,
Total	9·39

3. In the case of Forests the Revenue (gross) is included in the total of Receipts under the principal heads above. In 1923-24 it was Rs. (lakhs) 591 (provincial accounts only).

The expenditure on Forests was Rs. (lakhs) 359. This expenditure may be analysed under two heads :—

(*a*) that which is spent in working and managing the Forests as a purely commercial enterprise. We may assume that a similar amount would be spent by private business even in the absence of State enterprise. This should be deducted from that part of Forest revenue which accrues from such enterprise. If a surplus remains it should be classed as taxation;

(*b*) that which is spent on Forests otherwise than as a commercial service.

Thus if, as I roughly estimate, some 2 crores of Forest expenditure may be debited as Gross expenditure for a commercial service, this sum should be deducted from the revenue under principal heads to reach the true amount of taxation.

The treatment of land revenue should be on similar basis. The Gross expenditure incurred for administering the land regarded as a commercial service should be deducted from gross land revenue. The balance should be treated as taxation.

I have no data for even a broad calculation of this amount but it is obvious that it is considerable. Omitting this connection, the total taxation may be given as Rs. (lakhs) 156·70 less 2 crores; or Rs. (lakhs) 154·70; equivalent to slightly over Rs. 6 per head of population in British India in 1923-24.

One final point may be mentioned. The Customs revenue is really paid by the people of India as a whole. Thus in 1923-24 some 10 crores may be treated as contributed to the Central revenue by the people of the Indian States. This is perhaps an over estimate as consumption of imported commodities in Indian States may be less than proportional to population. In any case the taxation of the people of British India requires to be reduced by some 6 or 7 annas per head on this account.

DISCUSSION ON PROFESSOR HAMILTON'S PAPER.

Mr. K. J. Khambata, M. A., Sir P. M. Mehta Research Scholar at the University of Bombay, said that the Paper was the most thought-provoking of all the Papers read at the sessions. What Professor Hamilton wanted to point out was that *real* taxation per head had not increased but was really decreasing during the last 20 years. The key to the discussion was in the Index Numbers. Mr. Khambata did not know how Mr. Hamilton had arrived at the Index Numbers which he had used But he (Mr. Khambata) had before him Weighted Index Numbers of 100 articles, (as published in the *Index Numbers*, by the Dept. of Statistics), which, if used, would show an entirely different result. Taking 1871 as 100, the average weighted index for 1900 was 143 and that for 1920 was 273 which shows a rise of prices of 90 per cent. only during the twenty years, as against the 130 per cent. which Professor Hamilton had assumed. Correcting the incidence of Taxation per head in c. 1920 (Viz. Rs. 9·5) by this 90 % rise, he got Rs. 5·0 as against Professor Hamilton's Rs. 4·1—which means an *increase*, instead of a decrease, over the figure for c. 1900 of Rs. 4·7. Again the index numbers for 1924 could not have been ready; but if they assumed a fall in prices of 12 per cent. since 1920, that is if the weighted index number for 1924 was taken at 167, (as against 100 for 1900 and 190 for 1920), then the incidence of taxation per head in 1924 (viz. Rs. 8·4) would, when corrected, be Rs. 5·1 as against Professor Hamilton's Rs 4·2 ;—again an *increase* instead of a decrease. Thus in place of Professor Hamilton's figures of Rs. 4·7, 4·9, 4·1, 4·2, for the years 1900, 1910, 1920 and 1924, Mr. Khambata got Rs. 4·7, 4·9, 5·0 and 5·1, which means a real and substantial increase of about 6 % in the last 20 years. Mr. Khambata asked Professor Hamilton to explain how he had arrived at his index numbers. Mr. Khambata concluded by saying that it was important that the members of the Taxation Committee should not leave the Conference with the impression that the *real* taxation—per head in India was decreasing.

Dr. Matthai pointed out that Professor Hamilton's thesis had little practical value unless a concurrent attempt were made to investigate variations in the taxable capacity of a population during the period. If we approached the problem of taxation in a practical spirit, any conclusion with regard to variation in real wages would by itself not be of much help.

Prof. G. B. Jathar said :—

" Professor Hamilton has come to be considered a master of subtle insinuation but it is not fair to the writer of the Paper to look for all kinds of hidden meanings and pick him to pieces for what he may not have meant after all. Dr. Mathai said that Professor Hamilton's conclusions were so obvious as to be useless. But this is not the point. The point is whether Professor Hamilton's data are correct and whether they do yield the conclusions he has drawn from them. Professor Hamilton's figures must be taken on trust as none of us has had the time to verify them. Taking them for granted, we have merely to be content with agreeing that the conclusions do follow from them. I do not agree with the view that taxation cannot be discussed by itself without reference to proposed expenditure. It is quite possible and useful to discuss the best methods of raising Government revenue, always assuming that the additional funds are going to be spent in the best interests of the nation"

" Along with some others who have spoken before I do think that the use of the word " Undertaxed " by Professor Hamilton was unfortunate. His Paper has nothing whatever to say about the change, if any, in the taxable capacity of the people during the period he reviews. The word ' undertaxed ' does suggest that the taxable capacity has increased or at least has not decreased, and so far as the argument of his Paper goes this position is unproven."

Professor T. K. Duraiswami Aiyar said:—

" Professor Hamilton points out that though the revenues of the Government of India show an increase of 100 % in rupees, the real revenue, measured in commodities, has not risen. The use of the Index Number of prices leads to this conclusion. Index numbers have to be used with considerable caution and a very large margin of error has to be allowed, for Dr. Bowley giving evidence before the Royal Commission on Income Tax said that he would not rely on the Index Numbers for certain conclusions. Index Numbers in England are prepared with considerable care and there are various organisations preparing them in that country on different principles and the results reached by each method can be checked by reference to those reached by other methods. Indian Index Numbers cannot be considered to rank in value along with those of England. Consequently, it is not very safe to draw conclusions about the real character of the taxation from the Index Numbers of prices."

" Again, real taxation might be the same, but the distribution of the taxation might have altered, and such alteration might result in unmerited hardship As a matter of fact between 1914 and 1923 there has been such an alteration in the burden. The rise in prices has reduced the real taxation drawn from landholders, whereas consumption taxes in the shape of customs duties have increased from 11 crores to 45 crores, and income taxes have grown from 2 crores to 18 crores."

" Besides, the figures of real taxation are of no significance unless the change in the character of governmental expenditure is taken into account. Military expenditure has grown from nearly 30 crores to about 60 crores and the interest on ordinary or unproductive debt from 2 crores to 16 crores. Thus the altered direction of expenditure should receive attention while we deal with the amount of taxation."

"There are, however, other indications pointing to the deterioration in economic conditions. In spite of heavy additional taxation imposed in 1921-22 and 1922-23, the budget estimates of revenue were not realised and heavy deficits were incurred."

" As regards Commercial Services Prof. Hamilton regards any sum realised over and above the bare cost of service, for example, in respect of railways, as taxation. To my mind this is not a correct attitude. The State in India is entitled to charge rates and fares that will bring a commercial return and such a return though it is above the bare cost of services is not tax revenue. When especially it is borne in mind that a large part of the country is not opened up by railways, that elements of the population like the depressed classes do not make much use of the railways and the general tax-payer had made large contributions upto 1900 to meet the rail way deficits, there is no justification for holding that any return above bare cost is in the nature of taxation."

Professor R. M. Joshi said:—

The thesis Professor Hamilton seeks to prove in his ably-written Paper is that India is undertaxed, that the growth of revenue has just kept pace with the growth of population and of prices, that the people can and will pay more for developmental purposes as the money thus spent will return to them manifold. The position taken by Indian thinkers, on the other hand, is that the mass of the people feel the weight of taxation to be very heavy, that they are not at all satisfied that the money they pay at such sacrifice is spent in their interests and that until that happens they cannot possibly consent to bear additional burden. How is the tax-payer's money applied at present ? Let us take some comparative figures. Great Britain, which bears the ultimate responsibility for the defence of the whole Empire, spent on defence £ 77·0 m. out of a total expenditure of £ 195·6 in 1913-14 *i. e.* 39½ % and in 1922-23 she spent £ 111·0 m. out of a total of £ 812·4 m. *i. e.* 13·6% (figures taken from Statesman's year Book). India, on the other hand, spent on defence Rs 31·9 crores out of a total central expenditure of Rs. 77·4 crores in 1913-14 *i. e.* 41·3 % and in 1922-23 she spent on Defence Rs. 72·9 crores out of a total central expenditure of Rs. 137·9 crores *i. e.* 52·9 % (figures taken from the Finance and Revenue account of the Government of India). Are we to understand that as a result of the great war India's responsibility for defence greatly increased whereas that of Great Britain was greatly diminished ? If we compare India with the Dominion of Canada, the discrepancy is glaring to an astonishing degree, for in 1921 out of a total federal expenditure of 361·1 million dollars Canada spent only 14·5 on defence (figures taken from the annexure to the Taxation Enquiry Committee's Questionnaire, 1925).

" Professor Hamilton has raised another important question viz., whether Commercial Services like the railways should contribute anything to the general revenue. He is of opinion that they should not, because all the excess over-cost of production which is taken from the consumers in the form of higher rates and fares is nothing but so much disguised taxation. Now as regards Indian railways, it must be remembered that for full fifty years they have been a losing concern and the general tax-payer has been making up the deficit. So the contribution is nothing like an obligation, it is more like repayment of a debt. We may note too that in Australia while only 20·96 per cent of the revenue of the states is derived from taxation, 57·80%arises from railways, and even after allowing for working expenses viz., 37·85% a clear net gain equivalent to 20% of total revenue accrues to the states. So contribution from the railways to the general exchequer would be nothing novel in India.

(The Australia figures have been taken from the annexure of the Taxation Committee's Questionnaire referred to above)."

Professor Gurmukh Singh said:—

"It is difficult to understand the object of Professor Hamilton's paper. Apparently it tries to prove that taxation per head of the population has not increased if the change in prices is taken into account That after all is not a very important conclusion. Professor Hamilton has not dealt with the expenditure side which is more important. Taxation must be for some specific purposes. Increase in taxes is not so axiomatically good."

" Again, it is difficult to know what under-taxation means. If it means "undeveloped" as explained by Professor Hamilton, why say "undertaxed" and not "underdeveloped." India may be undeveloped but is India undertaxed at present? The speaker wanted more light on the question from Professor Hamilton."

SOME ASPECTS OF INDIAN FINANCE

BY

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The Reforms Act of 1919 has, in many ways, revolutionised the question of Indian Finance and in attempting to give a greater degree of financial stability to the Provinces, has put the Government of India in the position of a pensioner of the Provinces to cover her expenditure.

Since the Reforms the chief sources of revenue for the Government of India have been,

(1) Customs
(2) Income-tax
(3) Opium
(4) Salt
(5) Miscellaneous;

and another chief item, apart from taxes, has been the so-called Provincial Contributions or levies.

I shall not enter into the equity or otherwise of the settlement of Provincial Contributions as settled by the Meston Committee; but shall endeavour to examine the position of the Government of India with reference to its budget.

Mr. Howard (of the Government of India) made a statement before the International Conference at Brussels in which he said :

" In the financial year preceding the war 1913-14, (on the basis of Rs. 15 to the £) India's gross Revenue amounted to £85,000,000 and the expenditure to something less than £83,000,000."

The corresponding figures for the budget of the year 1920-21 are £134,000,000 and £132,000,000. These would be considerably less if net figures were taken. The more important enhancements in taxation were made under the heads "customs and taxes on income", which gave increases of revenue from 110 to 250 millions of Rupees and from 30 to 170 millions of rupees respectively. On the side of expenditure, the cost of military services rose to 570 millions of rupees in 1920-21 from 300 million rupees in 1913-14.

It will thus be seen that in spite of the great increase in her taxation, India has not been able to realise a good surplus budget, owing largely to her increased expenditure on both the Civil and Military services.

As long as India does not become an equal member of the British Commonwealth but continues to be governed as a dependency of the British Empire, it is not possible to expect any reduction in the main item of expenditure of the Government of India, though it may be possible to change or improve its direction in more useful channels than heretofore. The Government has a great deal of responsible work to do in the direction of the betterment of the people and it may require all that the country can spare both under direct and indirect taxation.

But such taxes as the Government levies must be based on the canons of an intrinsically sound system of taxation and in conformity with the principles of other progressive and civilised countries. The system must be scientific in its basis of classification, equitable in its incidence, and easy to collect. The great ultimate in all taxation is the principle of maximum slice of the citizen's bread consistent with his minimum dis-satisfaction and his continued efficiency *i.e.* the tax-payer's "ability to bear the tax", or as the scientist would put it "the principle of the limits of perfect recovery". And no Government (necessarily a monopolist), would in the long run be justified in taxing to the utmost capacity of the people. There must be some elasticity in the system of Revenue-making and every Government must take jealous care not to go too close to the taxable capacity of the people.

I shall now examine some of the taxes which are assessed in this country.

Let me take the Income-tax. It is just the tax that follows the modern canons of taxation; but even here improvements may yet be made. At present incomes under Rs. 2,000 per annum are excluded from any assessment But it is as illogical as it is inequitable that for incomes of over Rs. 2,000, no abatement is allowed. There can be no objection to the untaxable minimum being reduced to Rs. 1,000 but such amount should be excluded from all incomes for assessment. Higher incomes are taxed progressively and subject to the limit of taxing capital, progressive taxation can be carried to a considerable degree. The figures given below are instructive as showing the elasticity of the revenue from Income-Tax.

Government	1911-12	1920-21
	Rs.	Rs.
India	5,65,94,408	22,19,28,478
Madras:	32,06,625	1,96,49,284
Bombay	54,30,461	6,79,02,289
Bengal (including Behar and Orissa but excluding Eastern Bengal)	55,75,770	8,39,75,291
Punjab	16,21,859	65,88,628
United Provinces	24,15,667	95,72,900
Central Provinces	7,05,639	35,25,824

In the course of 10 years the income under this head has quadrupled and it would appear that the danger point has not yet been realised and there is room yet for increases in the higher income at the top.

Most European countries have adopted the policy of progression in the rate of assessment and India also has rightly followed them. But there is yet much to do in improving her system. Prof. Seligman in his Essays on Taxation (page 461) says of New Zealand that "the income-tax is payable only on the excess over £300 and certain minor deductions are allowed. The tax is periodically fixed and the authorities make a differentiation between the incomes of Corporations and individuals. The noteworthy feature is that the exemption is accorded only to persons domiciled or permanently resident in the colony. The Australian Income-tax has an elaborate scale running up to 25 per cent. It may be noted that on earned incomes over £7,000 (Rs.114,000) the rate is 5s in the £ or 4 annas in the rupee and on incomes derived from property the tax is 25 per cent. or 5s. in the £ for amounts over £6,500 (Rs.97,500). The exemption in the case of unmarried tax-payers is only £100 and to those with dependants £150 and there are other minor deductions as well.

A survey of the conditions existing in other countries will be full of lessons to the Indian tax payer and it is unnecessary to make out a case for alterations in some degree in the Income-tax assessment in this country as the figures speak for themselves:

In Japan, incomes of individuals are taxed on the following basis :

Under Rs. 1500	@ 1 %
,, ,, 2250	@ 2 %
,, ,, 3000	@ 3 %
,, ,, 4500	@ 4 %
,, ,, 7500	@ 5 %
,, ,, 10,500	@ 6½ %
,, ,, 15,000	@ 8 %
and so on	
Between Rs 3,00,000 and ,, 4,00,000	@ 33 %

The minimum taxable income was raised from Rs. 750 to Rs.1,200 and abatement of Rs. 150 is allowed for each non-earning member of the family *i.e.*, parents over 60 years and children under 18 years of age.

Again as regards the incomes of firms or Corporations:—

When the annual profit of business is 30% on capital, 20% of the profit is charged as tax.

Foreign Corporations in Japan are taxed as follows on their profits:—

(1) On the amount in excess of 10% of invested capital the tax is 4%

(2) On the amount in excess of 20%; 10%

(3) On the amount in excess of 30%; 20%

(4) On income derived from business on assets in Japan 7½%

India can do something in the direction not only of increasing the rate of progression on high incomes, but can also differentiate in assessment between Indians and domiciled Europeans and others who are out here only as fortune makers or mere Service-men. On the analogy of Japan, I may venture to suggest that India will do well to assess incomes over 2 lacs of Rupees a year at 25% and progressively up to 50% on larger incomes. Incomes of more than Rs. 10,000 a year may be taxed at one anna in the Rupee and those above Rs 20,000 at an anna and a half in the Rupee. Between 30 to 50 thousand rupees, the tax may be raised to 15% or a little over 2 annas in the rupee. Within these limits, the details can be fixed and varied according to the number of assessees and the maximum that the tax may reasonably be expected to yield. It is the application of the progressive principle that is important and not a halting appreciation of it.

Let me now turn to the revenue under Customs:—

India has suffered badly from the application of the principle of Free Trade—the ideal of humanitarian economists—for over a century, and the Government of India has after all been forced to give it up and adopt a policy of Protection—a discriminating protection, to ensure increasing revenue for its growing expenditure and also to foster a few chief industries in the country From 1911 to 1924, the customs revenue increased from 9½ crores of rupees to 40⅗. The growing heads of the Government of India have no doubt necessitated an increased customs duty in general, but it can hardly be said that the limit of such taxation has been reached. Cotton-piece-goods imported into this country are now taxed at 11% ad valorem and cotton twist and yarn at 5%. And, not long ago, even the Government of India was prepared to raise this tariff on piece-goods even to 15% under certain conditions In Japan cotton yarn is taxed at between 5·8 yen (Rs. 1½=1 yen) and 30 yen for every 150 lbs (Troy) and Hemp yarns at 10% ad valorem. Handkerchiefs are taxed at 35 to 50% ad valorem and carpets at 30%. Many kinds of cotton manufacture are taxed at 30% ad valorem (vide the Japanese Year-book for 1921-22) Cigars and cigarettes which in India are taxed at 75% ad valorem are in Japan taxed at 355% ad valorem. Dyes and colours are taxed at 15% in India, but in Japan at between 20 to 35%

Regarding the revision of the Customs duties in India, Professor Shah in his recent book on "Indian Trade, Tariffs and Transport" (pp 331-367) suggests that all Government Stores for the use of the public services shall be charged the heaviest duties and arms and ammunitions and military stores at 150% and they are worth consideration. He would have the duty on motor-cars and mechanical instruments raised to 50% as also that on furniture and other manufactures of wood. His suggestion in regard to the raising of the duty on leather manufactures to 50% is exceedingly useful and would help the large indigenous leather industry

It is not possible in this short Paper to discuss each item in the customs tariff from a comparative stand point, but enough has been mentioned to show that a revision of the tariff can safely be made in a number of directions to the advantage both of the country and of the Government. The country demands with one voice substantial protection against Lancashire piece goods as an economic necessity and in this matter the Government will do well to consider seriously the following recommendations of Prof. Shah in providing a scale of duties in regard to piece goods :—

On cloth made of yarn of 10 counts and under	3%
Between 10 to 15 counts	10%
" 15 to 20	29%
" 20 to 30	25%
" 30 to 40	30%
" 40 to 80	35%
" 80 to 120	40%
Over 120 Counts	50%

In the matter of yarn he would suggest that it be taxed at 20% if over 20 counts and under 40 counts and at 25% on all counts over 40 subject to certain refunds in particular cases.

The sugar industry in India needs further protection and the duty on it may well be raised to a higher figure than at present obtains.

I now come to a discussion of Indian expenditure. It is a recognised principle of Public Finance that income and expenditure must be co-ordinated as they are naturally correlated, and it would be no use discussing the ways of augmenting the revenues of a country for its own sake without considering the absolute minimum of expenditure necessary for the safety of the State and the progressive well being and efficiency of its citizens.

The problem of India's defence is beset with great difficulties and is a matter of supreme anxiety both for the Government of India and its people. The net expenditure for the Government of India charged against revenue in the course of only 10 years between 1911-12 to 1920-21 rose from 79½ crores to 170 crores of rupees and in the year 1924-25, it would amount probably to 130 crores of rupees eliminating Railway transactions which cease to be a direct charge on Central revenues under the new system of separate accounting. But of this total expenditure more than 50% is covered by Military charges. They have increased year after year, from 29·33 crores of rupees in 1911-12 to 66·72 crores in 1918-19 during which period the Great War intervened, but what is strange is that even since the conclusion of peace, when India has no fear either near or remote of any foreign aggression, Military expenditure has continued to increase and has trebled in the course of 10 years amounting to 87·38 crores in 1920 21 The budget for 1924-25 is 60·93 crores and one might safely predict from past record that the actuals would far exceed it. The Inchcape Committee was satisfied that 50 crores ought to be fully sufficient for the efficient up keep of the Indian Army. One may be tempted to observe that Peace is after all more costly than War.

Unless the Government of India have no faith in the loyalty and the law-abiding nature of its people, the present policy of increasing Military expenditure cannot be justified. But in the larger economic interests of the country and the consequent assured stability of the State, it must be pointed out that the efficiency of Defence may be maintained by cutting it down in certain directions. A fraction of the heavy expenditure now incurred in the maintenance of a large Standing Army may well be directed to the training of educated Indian young men, who have no career, but who may well be utilised by the State with profit to themselves and to the State also, in Military service as Volunteer Reserves and Government would find that this pays best in the long run as a great economical asset. The beginning so far made in the matter of instituting Territorial Forces is a very feeble, halting, and snail-pace attempt more by way of concession to criticism than by honest and abiding faith in its economy and usefulness. If the system of enlisting Volunteers for Military service and Indianization of the Regular Army be earnestly and substantially given effect to, it would in addition improve the morale of the people, increase their efficiency and make patriots of them. It will thus be possible eventually to dispense with a significant section of the Standing Army without danger to its efficiency as a Defence Force.

In this connection, it may be pointed out that the cost per unit of a British cavalry regiment is estimated at a little more than 17 lacs and that of an Indian regiment at about 8 lacs. The cost of a unit of the British Infantry is supposed to be 21 lacs and odd, while that of the Indian Infantry is a little less than 6 lacs. The average pay of a British soldier is about Rs. 100 per month while that of an Indian sepoy was only about Rs. 15 in 1922. In Japan, the average annual expenditure per capita on rank and file is as follows:—

A sergeant—major costs	339 yen	(Rs.508½)
Sergeant	261 "	(" 391)
Corporal	201 "	(" 300)
Superior private	155 "	(" 232½)
Private	151 "	(" 226)

Comment is needless in regard to the possibilities of economy in Military expenditure. The cost of training an Indian infantry unit is estimated at 4½ lacs and if a really bold attempt be made to give the necessary training every year for educated young men between the ages of 18 to 21, it would be a very great advance in conserving the man-power of the country.

I shall not omit to say a few words in regard to the salaries that are being paid or proposed to be paid to high Government officials in this country. The Lee-Commission has recommended an increase of salaries which is expected to cost the tax-payer an additional burden of nearly 1½ crores per annum Here one may well compare the salaries paid to high officers in Japan:

Prime Minister is paid	Yen 12,000	p. a.
Ministers of State	" 8,000	"
President of Council	" 6,000	"
Chief Secretary	" 5,000	"
Secretary to Council	3,700 to 4,200	"
Local Governors	3,700 to 4,500	"

For officials of different ranks the salary varies from 750 yen to 3,000 yen per annum The salary for the highest military officer-general is 7,500 yen per annum and for an admiral an equal amount. There can be no doubt that India has the most costly service in the whole civilised world. And it is the poorest country even according to unprejudiced official testimony. The cost of living in this country, even for high officers to secure the necessary comforts, does not warrant the increase of salaries proposed to be given.

Dr. Gilbert Slater said, at the Economic Conference held at Allahabad, that the reduction of salaries for men at the top is not likely to solve the problem of Indian Finance, as, in his opinion, much more may be needed to pay the intermediate and subordinate ranks of the Public service. May we ask him if further increase will improve Public Finance? Reduction may not solve it, but it will certainly help to solve it. Dr. Slater's argument is no argument at all for paying high salaries but warrants the reverse of it. The disparity in the salaries is ridiculously out of proportion in comparison with the efficiency of the different grades of workers in the public services. Add to it the reflex, but perfectly legitimate, effect of the high salaries at the top in creating and maintaining an insistent discontent in the intermediate and lower ranks—an effect which is a source of danger to harmony in work and efficiency.

There is one strange item of expenditure of about 30 lacs of rupees on the maintenance of the Ecclesiastical Department. Only 1 in 100 of the population is a Christian and yet the other 99 un believers are taxed to maintain the Christain churches and their clergy. This expenditure in all equity must not be incurred by the State in India, and the money saved under this item may with advantage be utilised for supplying cheap salt to the poor instead of trying to increase the duty on it to balance budgets. Sir Purushottamdas Thakurdas made out a case in the Inchcape Report against this part of the expenditure of the Government of India. And Mr. M. N. Joshi of the Servants of India Society also raised his voice of protest against this expenditure at the last budget meeting of the Legislative Assembly (in 1924). But it is forgotten that this item of expenditure cannot be interfered with by the Government of India as it is secured by the British Parliament by the Government of India Act of 1919.

The subject of Provincial Revenues is naturally connected with Imperial Finance, to which these revenues are a large contributary, apart from their domestic or parochial importance, and as such it is necessary to examine the system of taxation and expenditure in the Provinces.

Since the introduction of the Reforms, one of the main sources of the Provincial Governments has been the revenue from Land The figures given below indicate the position of the different Provinces in regard to their income from this source:—

For 1920-21,	Madras realised	Rs:—	5,79,81,189
	Bengal	,,	3,03,91,183
	Bombay	,,	4,34,73,774
	United Provinces	,,	6,80,47,676
	Punjab	,,	2,99,61,548
	Burma	,,	4,90,90,702
	Bihar and Orissa	,,	1,59,91,472
	Central Provinces	,,	1,22,27,089
	Asssm	,,	83,85,222

Land Revenue in India has a history of its own. But as economists it is our duty to examine, in the light of modern economic theory, whether there is any principle of justice or equity in the assessment of land followed by the Government in the different parts of the country and whether the incidence of such taxation is fair as between the Provinces and different systems of tenures.

The following figures in relation to the contribution from agricultural land would be instructive:—

		Incidence per cultivated acre	. Incidence per head of population
Madras	Ryatwari.	Rs. 2 7 4	Rs. 2 0 6
	Perm. settled:	,, 0 14 4	,, 0 11 11
Bengal:	Temp. settled:	,, 1 12 3	,, 0 10 6
	Perm. settled:	,, 1 2 0	
Bombay:	Temp. settled:	,, 2 3 2	,, 2 5 3
	Permp. settled	,, 1 10 4	
United Provinces	Temp. settled:	,, 1 15 1	,, 1 6 9
	Perm settled	,, 1 2 11	,, 1 5 1

It will thus be seen that Bengal contributes only Rs. 3,03,91,03 compared with Rs. 5,79, 81,189 from Madras and Rs. 6,80 ,47,676 from the United Provinces. Mr. Jack in his "Economic Life of a Bengal District" (p. 118) justly observes "that the revenue demand in Bengal is only *half* of what it is in any other province in India, although in all probability the income per head of the population is greater than in any other Province". This shows that the land revenue assessment of the country, as a whole, is neither just nor fair to the individual agriculturists of the country between themselves and it lacks a scientific and economic basis. The Bengal settlement, whatever might have been its value as a working compromise in the early days of conquest and Empire building in India, appears to the modern critic to be quite unfair, in that it has been permanently settled once for all and on account of an accident of historic opportunism does not admit of a revision based on the principle of elasticity in assessment according to the growing value of land, capital, and the value of the produce.

The principle of Permanent settlement of land revenue, as all other revenue from taxation, is repugnant to principles of sound economics under any civilised Government and the system differentiating in India between Zamindari and Ryatwari, Permanent and Temporary systems of tenure are not only contrary to the principles of economics, but run counter to the sound principle of government of equality in its treatment of its citizens and of the Provinces. The sooner the various systems of tenure are revised and made uniform, the better our public finance will improve and the greater will be the happiness and contentment of the people.

There is yet another point which I wish to urge on this Conference, namely, that agricultural incomes ought to be placed on a basis similar to that of incomes from other sources. The old idea, that the incomes from land are something radically different from incomes from other sources, has not been accepted by modern economists; and the late Professor Marshall was of the view that the rent of land was only a leading species of the same genus. Property in land is a freehold and not a leasehold. The ancient Hindu Law books indicate the right view in this matter, that cultivated land was not to be considered as the property of the King, who was entitled to only a sixth share of the produce of the land (vide Manu s Code and Jaimini's Mimansa).

Even Modern Jurisprudence cannot recognise State ownership in land. It is only fair that the private investor in land should not be penalised in comparison with his brother investor in banks or other securities. I have found, during my investigations in some Ryatwari villages in South India, that the average holding of land is much less than 5 acres and the cultivator has to pay something between Rs. 50 to Rs. 75 as land revenue (apart from incidental cesses) on an income which at its maximum would be considerably less than Rs. 1,000 per year. Is this fair? Is it just to tax the agriculturist in this way?

The fact that the Government needs a Revenue is no reason to perpetuate an inequitable system of raising it. To say that the Government of India only inherited the system from the Moghuls is no argument for its continuance, for that would strike dead its claim for civilisation We must remember that near about 72% of the people of India live upon agriculture and it is time we seriously and sincerely consider whether the taxable capacity of agriculturists in the greater part of the country has not already been touched and threatens to break under our heavy and inequitable system of assessment in the Ryatwari areas. I would therefore suggest that agricultural incomes of less than Rs. 300 at the least be exempt from assessment and if necessary steps may be taken to prevent a sub division of holdings to anything less than from 3 to 4 acres, or in the alternative, holdings yielding less than Rs. 200 per annum. Such a provision for exemption of small agricultural incomes obtains even in England, for, according to Prof. Seligman (Essays on Taxation, 9th Edition, p. 490) no duty is assessed on small holdings, that is, on agricultural land occupied and cultivated by the owner, provided that the total value of all land owned by him does not exceed £500.'

Local Finance bears to Provincial Finance the same relations as Provincial Finance bears to Imperial Finance. A very considerable revenue is being raised by local taxation, thus relieving the Provincial Governments not only from the cares of local administration but also of a very considerable share of expenditure. The following figures which relate to the Municipal Revenues show total income and the incidence of taxation in varying degrees in different cities.

			Incidence per head			Total Incidence		
			Rs.	a.	p.	Rs.	a.	p.
Madras City.	Rs.	70,54,000	6	10	4	10	1	8
do. Presidency.	,,	1,13,92,473	2	0	3	3	13	10
Bombay City.	,,	14,37,36,331	14	8	6	17	3	6
do. Presidency.	,,	2,30,10,678	3	13	4	6	15	3
Calcutta City:	.	2,38,43,350	12	7	6	17	3	8
Bengal Presidency	,,	80,47,646	2	11	7	3	7	8

And the incidence of the rates and taxes of the Local Boards in the different Provinces are as under:

	Rs.	a	p
Madras:	0	11	6
Bombay:	0	13	6
Bengal:	0	4	1
United Provinces:	0	5	9
Punjab:	0	12	3
Bihar and Orissa	0	5	8
Central Provinces.	0	6	4
Assam:	0	6	1
North West Frontier.	0	6	1
Delhi·	0	14	11

The average for all Provinces is at present Rs. 0·7-10 having risen from Rs. 0-3-10 in 1911-12.

The figures given above on examination are exceedingly instructive. I am inclined to agree with the late Mr. Jack "(The Economic Life of a Bengal District." p 129), when he says that "the truth is that in Bengal not only is all taxation exceptionally light, but local taxation in particular is an insignificant burden upon the resources of the people, that the provision of local conveniences and material benefits is in consequence very inadequate, but that it cannot be improved unless large sums are placed at the disposal of the local authorities."

A good number of municipalities in Bengal can increase their incomes by introducing what may be called the " Profession Tax," with a prospect of consequential advantage to the comforts of the people and also charging what may be called the "betterment tax" in so far as such betterment may have been contributed to the social welfare by the municipal authorities. The following clause in the Housing and Town Planning Act of 1909 of England is worthy of our attention in this matter—"Where by the making of any town-planning scheme any property is increased in value, the responsible authorities, if they make a claim for the purpose within the time (if any) limited by the scheme, shall be entitled to recover from any person whose property is so increased in value, one-half of the amount of that increase."

I must proceed to the questions of village taxations. The villages are the very back-bone of the country, nevertheless, our neglect of them is not only economic folly but a crime against the people who toil for the whole country. The sanitation of the villages and the conditions of cattle are anything but satisfactory. From the distant past till a century ago, the Indian village had been a natural economic and political unit in the country, unaffected by the centralised systems of an Imperial or Provincial administration. Its autonomy and elasticity have gone for ever. The only remedy to make the villages come to life again is to revive the old system of village administration by Panchayats with necessary changes to suit the modern needs of society.

It only remains to conclude. It may be asked "Is there any scope for new additional taxation.?" I am afraid we have almost reached our taxable capacity in many sources. Even the Government begin to despair. But, as economists, it behoves us to point out that there is one great source of revenue which has not yet been sufficiently tapped, i.e. the duties leviable on inheritance. It is true that Acts of Government of India exist levying succession duties in the matter of recovery of debts. But that does not touch inheritance as such. Sir Josiah Stamp in his "Wealth and Taxable Capacity" (p. 190) says "The taxation of inheritance progressively, as the inheritance becomes more removed from the original saver, would not penalise the individual worker; it might make him work harder to know that nearly all he himself produces and saves will pass intact to his sons; whereas what he has inherited from his grandfather will be heavily taxed." Inheritance is not hard-earned by the man who inherits. It is in the nature of a windfall with light burdens if any. And Governments by securing the inheritor his peaceful enjoyment of unearned property and its incomes are entitled to get out of it a proper tax. However repugnant it may be to tradition and the natural feelings of members of a family, an inheritance tax is only just and reasonable from the social point of view. If the people of India and its Government would only agree to look at the problem of Indian Finance from a dispassionate and economic point of view, there is yet hope of balancing the budgets by cutting down extravagant expenditure in some cases and realising further revenue for its legitimate purposes by tapping the sources yet untouched as pointed out above and adopting the means of application of the principles of assessment above outlined

DISCUSSION ON MR. S. V. AYYAR'S PAPER.

Professor S. V Ayyar, in reply to Professor Gyan Chand's remarks, said :—

" I do not wish to say much by way of reply, for many of the suggestions made in my Paper Mr. Gyan Chand I have only to say that my scale of graduation is *not* scientific but is only the basis for a discussion. Graduation or progression is the principle I have outlined and I have pleaded only for a steep progression on higher incomes In regard to the question of retrenchment Professor Gyan Chand said that we should be practical, but as Economists we ought not to shut our eyes to economic issues. As taxpayers we are entitled to see that our money is properly spent and I hold that there is scope for a great deal of retrenchment in the expenditure of the Government of India Our importance need not necessarily make us intellectual weaklings."

" In regard to the question of exemption of agricultural incomes my suggestion of Rs.300 was made merely to provoke criticism, for I felt that relief to the ryots was necessary and begin somewhere, and from the point of view of practical politics it may not be possible to treat ryots in the same way as income-receivers in non-agricultural areas

THE INDIAN SYSTEM OF TAXATION,

By

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"The war has been a first-rate Professor of Economics. It has taught with great efficiency invaluable lessons and not the least of these is the value and importance of really sound banking in the body politic." This is no less true of taxation than of banking.

Our taxation system owes its present form to a variety of circumstances.

1 To the changing economic conditions of the country from a poor agricultural country it is growing into a manufacturing one, with a land-owning class, growing middle class and wealthy capitalists, financing both the industries as well as trade.

2. To India's political connection with England, receiving its policy from the latter.

3. To the economic thought of the different times, to Adam Smith for the Free Trade Policy and so on.

Constant researches have been made in the different branches of Economics, and now we are in a position to utilise these for ourselves and build up such a system of Taxation as may have as few defects as possible and may also suit the existing economic, social, and political conditions of the country.

The present Income-tax is progressive and satisfies the canons of taxation, but it is defective in the following respects:—

1. In other countries a distinction is made between earned incomes and un-earned incomes. The former are charged a slightly lower rate. This is on principle necessary, for in the first place the source of saving lies, in the first instance, in the earned incomes and once capital is saved, saving is made easier, and in the second place it is not capital alone. (I mean the amount of money, spent upon one's training) that is responsible for his earned income, but also natural endowments with which he is gifted. To make this point clear, take an investment of Rs. 100,000 returning Rs. 10,000,

and a man earning Rs. 10,000 in the form of salary. The latter returns are not due to Rs. 100,000 spent on his education but also due to his in born abilities, to the differential advantage he enjoys over others of his kind.

2. Our Income tax allows no abatement or deduction of the taxable minimum from the incomes of the lowest assessees. In other countries provision is made for the deduction of the taxable minimum from the income of the tax—payer and the tax is levied upon the difference only. This provision is necessary. In addition to this abatement allowance are given for children, relations and family. In my opinion there is no need for any allowance of this sort. It acts as a kind of inducement for marriage. It may suit the conditions in England but in India the problem is quite a different one. The marriageable age is low and so also is the standard of living in India. Early marriages require either to be stopped by social reform or to be discouraged by means of marriage duties etc. The case of the un-divided Hindu family is different and requires special consideration, because the single Income is made up of many individual incomes, which taken by themselves would bear no tax or only a low rate.

The next item of importance in revenue is Customs. It ranks second only to land revenue in the Indian Budget, and now that the latter has been made over to the Provinces, it will occupy the first place.

The lines upon which the Customs Tariff has been modified during the last few years were sound. A few suggestions may be put down here.

That export duties should be utilised to increase the Revenue receipts. Most of the exports are either food materials or raw materials, the demand for which must be very inelastic, and India enojys a monopoly of some of these *e.g.*, Jute, oil seeds, shellac. Light export duties may be levied upon all exports and higher duties upon the selected articles. This will serve the following purposes;—

The duties upon those goods for which India enjos a monopoly such as jute, certain oil seeds, shellac,, will be borne by the foreigners.

Other goods which are used as food materials or raw materials, if their exports fall, their prices will fall to the advantage of the

Indian Consumers and Indian manufacturers. The possible adverse effect may be reflected in the fall of exchange and consequent rise in the price of foreign goods. The probabilities are that it will not, because our demand is elastic and the foreigners' demand is inelastic, we can decline to purchase, if the price is high while they can not. Even if it does fall, it is to our advantage, because we want protection for Indian industries. This will also protect the masses from the high price of food materials. Many countries, Japan for one, are regulating the export of food matetials in the interests of the country. India should also do the same.

Then the import tariff is capable of great expansion. Precious metals, precious stones, pearls these bear no import duty. These should bear even very high duties for the following reasons :—

They are very valuable and therefore they will produce a good amount of revenue with the least cost.

The burden will fall upon the richer classes.

Their high price will discourage their use and the habit of hoarding and encourage investments.

The duties upon motor cars, sugar, tobacco, etc., can be raised higher still. The Tariff Board is already collecting data for the same.

Excise, consists of duties levied upon the production of the various intoxicants, and license fees for their sale, and also from duty levied upon cloth produced by machinery in India The revenue from this source has gone on increasing from about 6 crores in 1902 to about 18 crores in 1922. It is held that this is due to the more efficient administration of the Excise and the prosperity of a certain section of the community. Drinking is a terrible habit. It saps the productive energy of the consumer. It reduces his income and thus the national dividend, out of which come the revenues of the State. It brings untold miseries to the families of its wretched victims. It is not therefore sound policy to countenance it. Government could have raised money by allowing and taxing gambling and lotteries, but it did well in prohibitting them It should do the same to exterminate this more formidable evil. America is doing it. The Indian Government will have the support both of the Hindus as well as of the Mohammedans if it penalises drinking. There will be an immediate loss of about 18 crores to the Government, but this will be paid thousand fold to it in the long run. Let us study the statistics bearing upon it.

If we add the value of imported liquors, we shall find that about Rs. 100 crore at the least are spent every year on harmful consumption. If this amount of money be spent upon imported cloth, sugar, cycles, silks etc. it will bring to the Exchequer something like 10 to 20 crores of rupees; if it be invested in industries, it will be a source of income and a last resort in time of need, while at the same time it will swell the revenues of the Government in the following ways :—

1. Tax upon the increased profits of companies.

2. Increased income-tax on unearned incomes.

3. Increment value tax and inheritance tax.

It will also increase the efficiency of production.

I have suggested that Excise duties should be abolished altogether. This will mean an *immediate* loss of of about Rs. 18 crores to the Government while the opium revenue is also going to disappear from the budget in due course of time. Money will be required by the Government in increasing amounts. I propose, therefore, the following measures;—

1. That Customs Schedule should be changed and higher import and export duties be levied as laid down above.

2. Marriage duties be levied, the rate varying with the age of the married couple, in inverse proportion, higher for early marriages and lower for late marriages This should be tried as an experiment, at least, to see how far it succeeds. Something of the kind is badly needed in India, for the poverty and degradation of the Masses is due to early marriage and big families.

3. An inheritance tax may be introduced of a progressive nature. This is very necessary for the following reasons:—

(*a*) Upto the present time, un-earned increment value of the landed property as well as of other capital have been left untouched by the Government, and so the value of landed property as well as of certain stocks has risen very high.

(*b*) During the period of the war, inequalities of wealth have increased, because in the first place the prices of food materials rose very high and consequently rents as well as the capitalised value of lands rose also. Secondly, foreign imports fell off and there was a consequent dearth of these. The prices of these rose abnormally high in some cases even 200 and 300 p c. This increased the wealth of the merchants who held stocks of goods, purchased before the war and also of manufacturers who gained in two ways in higher profits, and in the capital value of the shares. It may be graduated according to the relationship of those, who inherit the property, to the testator.

An inheritance tax will take long to produce income for the Government. It is necessary that an Increment Value tax should be levied upon the values both of land and investments, chargable at the time of transfer or sale of property It will fall upon the values of securities, when these rise. A flat tax should be charged first, and if found necessary it may be graduated later on, but to make this effective legislation it will be necessary to make compulsory the sale and purchase of securities through entries in books.

It is also very necessary that the Land Revenue sholud be placed on the same footing as the Income tax, otherwise, as at present administered, it is very anomalous and inequitable. I shall show this by concrete instances, that it may be judged properly.

1. Two plots of land of the same size and bearing Rs. 100 per annum the same rental are put to differant uses, one for agriculture and the other held for speculation. The former is charged land revenue say 50 p. c. and therefore its capitalised value is something like $50\times 100/10=500$, and the capitalised value of the other will be $100\times 100/10=1,000$ because it pays no tax. If it be assessed to Income-tax, in the first place it will be charged no tax, because its income is below the taxable minimum. Even if it does pay the tax, the tax is very small, 5 pies in the Rupee i. e., Rs. 3 Rs. 100, then its capitalised value will be $97\times 100/100=970$.

2. In the temporary settled tracts Land Revenue works out at about 50 p. c. of rent, and so the land-lord receives the remaining 50 p. c. income and its capitalised value as the value of land, while in a Permanently Settled area revenue is a fixed charged. Its

capitalised value has increased abnormally, because its rent has gone on rising regularly. This will be clear by the application of the above mentioned method to the rents and values of two equally productive plots of land, one in Bengal, and the other in the Punjab. The difference will be marked after a number of years. In the permanent settled area land revenue becomes regressive, the tax being fixed, the rate falls as the rent increases.

3. There is no minimum income exempt from Land-Revenue. A petty landlord, receiving Rs. 100 from his small piece of land pays Rs. 5. to the Government, while a big landlord receiving Rs. 100,000 pays 50,000, and a man, who holds stocks returning an income of Rs. 100, pays no tax. It is very hard upon the petty landlord.

Now if the Government applied uniform equitable tax to land, it will be a little higher rate because it will be upon un-earned income. It would have the following effects :—

1. It will bring two-fold gain to landlords in the Temporary Settled area. First, it will reduce the revenue they pay to Government for the highest rate of Super-tax is 6 as per rupee i. e. 36 p. c. It will exempt petty landlords from payments altogether and bring great relief to them. Secondly, it will raise the values of their lands by the capitalised value of the income they have gained, and this will amount to a great deal.

2. In the Settled tracts, it will be a certain portion of the landlords, who will pay a higher tax than the revenue they were paying before. They will suffer a loss in income and a loss in the value of land. Other landlords will gain.

Government will lose Revenue,

in Temporary Settled tracts Rs.	135,6,00,000
in Permanently Settled tracts ,,	72,00,000

Land will gain in value

in Temporary Settled....Rs.	135,60,00,000
in Permanently Settled.... ,,	7,00,00,000

Government will lose approximately a revenue of Rs. 14 crores, while the total gain in the value of land will be Rs. 140 crores. The value of land will rise not because of any improvements made by landlords, but because of the action of the Government, and so this increment in land value should be appropriated by the Government, and by the application of the Increment Value tax, suggested above and this will be in accordance with the accepted canons of taxation. This will remove all the existing anomalies and make the tax a part of sound equitable Income tax. It will also find favour with the landed class, for it will reduce their burden especially the burden of the small land-holders.

An excise duty upon betel leaf production may be levied. It will produce a good amount of money.

Professor C. N. Vakil states in his book entitled " Financial Administration of Modern India " that the sterling securities of the Government of India, issued by the Secretary of State for India, are exempted from Income-tax and that the Railway stocks are assessed to Income-tax upon their net profits (profits guaranteed interest) and that Foreign shipping Companies, carrying Indian trade, do not pay any tax.

The Indian Government should not lose money by giving preferential treatment to foreign capital. It is given worse treatment in other countries and finds a better market in India, that is the reason why it comes to India, and so it should be treated at least like our own capital.

Now to sum up. The main proposals are as follows:—

1. Income-tax should be improved upon the following lines:—

   (*a*) Distinction should be made between earned and unearned income, because the former is the first source of saving and is due to natural gifts etc. besides capital invested in labour.

   (*b*) For lower incomes, upto a certain point, abatements, i.e., deduction of the taxable minimum, be allowed. There is no need of giving allowances for marriage, children, and relations, or if these be allowed, they should be very slight, so that they may not encourage early marriages.

   (*c*) Incomes on the border line between two different rates should be charged special rates, so that the increased incomes be not absorbed by the higher tax rate *e. g.*

incomes between Rs. 5,000 and 5,050 should be charged 5·2 pies per rupee.

(*d*) Idle agents of production should also be taxed, such as land-sites, hoarded up capital. The latter to be touched by means of import duties on gold etc. and inheritance tax. Begging, like thieving, should be penalised.

(*e*) Land tax should be reformed and assimilated with the Income-tax. It will be welcome to landlords, because it will lighten their burden, and will make the tax more equitable. Government will lose roughly Rs. 14 crores, but the land value will increase by Rs. 140 crores. This should be appropriated according to the Increment value tax. This invested will bring in the same amount of revenue.

(*f*) Agricultural profits should be taxed just like other profits.

(*g*) Improvements on land should be taxed like other capital

2 An Inheritance tax, graduated according to relationship, should be introduced, for now the war-made wealth of India will make it productive.

3. An increment value tax be introduced, chargable at the time of transfer or sale of landed property as well as investments.

4. An entertainment tax may be introduced.

5. Marriage duties, graduated according to the age of the couple, or their income should be introduced, the object being to raise revenue as well as to discourage early marriages.

6. Income from the invested portion (permanent as well as periodical), of the Paper Currency Reserve should be used as a part of revenue.

7. Customs....The scale of import duties should be raised specially for motor cars, luxuries, precious stones and precious metals and also upon such manufactures as may be reeommended by the Tarrif Board.

Export duties should be levied upon a sliding scale for food materials. Higher duties to be levied upon goods for which India enjoys a monopoly, and for which foreign demand is inelastic *e. g.* Jute, hides, shellac, oil seeds.

7. Excise. Drinking, using other drugs should be penalised like gambling and opium smoking and duties established.

Excise upon cotton cloth should also be removed, or if it is retained similar duties should be levied upon industries which produce luxuries, also upon betel and tobacco.

8. Salt....The tax should be as at present, a reserve for increment in cases of emergency.

A word for local Finance.

Octrois should be abolished altogether from all Municipalities, for these interfere with the Freedom of trade. They are different from Customs duties just as foreign trade is different from Internal Trade. They are not used to protect city industries.

THE FUTURE OF DIRECT TAXES IN INDIA.

BY

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I.

Whatever may be the truth in the contention that there is no fundamental distinction of principle between direct and indirect taxes, I believe, every one present here will admit that this twofold classification of taxes is of considerable utility. Indeed, I hold, that the utility of this classification is much greater to-day than it ever was before; and, further, that it is likely to become greater still in the future. This becomes clear if we for a moment cast a glance at the history of tax-reform in the Western countries. The trend of history is unmistakably towards improving the position of direct taxes. In al most all democratic countries direct taxes are playing an increasingly important part. To take only one instance, direct taxes were responsible for 53% of the total revenue in England in 1908, whilst they yielded 71% of the total revenue in 1921. And who is there who is not aware of the intentions of the British Labour Party to increase the share of direct taxes, to have a levy on capital, and to shift more and more the burden of taxation on the richer class of people ? Indeed, it is possible to hold, that the progress of democracy in a country can be sufficiently accurately measured by the part played by direct taxes in its tax system.

It is very natural for democracies to give greater importance to direct taxes. To them, their advantages are over-whelmingly great; but, perhaps their greatest advantage is, that they make the burden palpably and painfully apparent. Of course, it is this characteristic of direct taxes which makes autocractic governments shun them and have recourse to the other class of taxes, in whose case the burden is disguised and not apparent. There is, however, nothing like direct taxes to arouse interest in public matters and national administration and that is why they are so conducive to the growth of healthy democracy. This is, however, not the only merit of direct taxes. The economist, even if he is not an admirer of democracy, is, nevertheless, a staunch supporter of direct taxes, because they can be easily and suitably graded to fit the capacity of the tax-payer The canon of least sacrifice or ability is perfectly fulfilled by direct taxes. Both the democratic statesman and the neutral economist like the elasticity and expansibility of direct taxes. When the cost of national governments increased during and after the war, it was to direct taxes that the Chancellors of Exchequers had to turn for the main increase in revenue. There is another minor advantage of these taxes. Evasion and deception cannot be easily practised in their case, and there is no question of the tax officers charging you more than the amount of tax, as is often done in the case of indirect taxes. Both from the point of view of the principles of taxation and the extension of democracy direct taxes are preferable to indirect taxes. This, of course, does not mean that indirect taxes are of no use whatsoever to the democratic statesman. Indirect taxes are often levied in democracies to help backward industries, or to check the use of certain nefarious articles, such as opium, liquor, tobacco, etc., or to discourage luxury. But, I hold, that, as far as possible, reliance should be placed on direct taxes.

It will be clear from the above remarks that I do not view the subject of taxation purely from the financial stand-point. I consider it perfectly legitimate, nay desirable, that the subject should be approached from the social (including moral and political) as well as financial points of view.

There is one other preliminary point that I wish to mention here and that is that I accept the ordinary, popular definition of direct taxes as those taxes where the burden is intended to fall on the person taxed, and not, in the ordinary course of events, to be shifted on to other shoulders.

II.

The history of direct taxes goes back to very ancient times. Land or property tax is perhaps the oldest form of taxation in the world. At any rate, from immemorial times, the Government in India has depended to a very great extent—though every year in a diminishing degree—on the proceeds of the land revenue. As a matter of fact this source of revenue has been considered of such great importance by the rulers of India that in their anxiety to preserve and improve their income from this source they have been led to make exaggerated claims of "Universal land-lordism" or "State ownership" of land. And even the British Government, which considers itself too civilised to assert the right of physical ownership over the life and property of the conquered people and which prides itself on its practical good sense and disregard of abstract or theoretical principles, persists in holding that all land in India is its sole property and that land revenue is only its share of the produce—the rent of the land—and not a tax at all.

Baden Powell, the well-known author of "the Land Systems of British India," after examining the whole evidence on the subject comes to the conclusion that "the term 'universal landlord' as applied to Government, can only be in the nature of a metaphor," especially when the Government has "distinctly conferred proprietory rights" on the people. The landlord in India, like his brethren in other parts of the world, possesses the usual rights of ownership. He can use, lend, sell, alienate, mortgage and transfer his land and he is fully capable of passing it on to his heirs. He has, no doubt, to pay a part of his income from land to the Government as land revenue, and the State has the right of seizing the land and selling it in case of non-payment of the revenue. But this is nothing unusual The State possesses a similar right to a share in other incomes and a similar power of attaching the property of those who refuse to pay taxes to the Government. As a matter of fact, taxes differ from other kinds of contributions by this inherent power of compulsion So, in the opinion of Baden Powell, and several other writers on the subject, there is nothing in the land revenue to distinguish it from other taxes and to call it rent. Writes Baden Powell: "If we cannot be content to speak of 'land revenue' and must further define, I should be inclined to regard the charge as more in the nature of a tax on agricultural incomes." At any rate, in his opinion, "the land revenue cannot. . . . .be considered a rent." I agree with Baden Powell that the land revenue in India is not a rent, but a tax on agricultural incomes. If the land revenue were a rent what necessity was there of holding enquiries and showing that the charge was not burdensome on the people? Eevey one knows that the Government only taxes, roughly speaking, one-half of the rent of land in the form of land revenue and that knowledge ought surely to have sufficed to protect the Government from any charge of cruelty! It was, because it was recognised in practice that the charge was a tax and not a rent, that the need was felt of justifying it and showing that it was not burdensome. Surely the Government which is forced to the recourse of doubling the salt tax and deriving additional income from such unpopular measures would not have left the one half of the "rent" with the "proprietors" of the soil many of whom could afford to pay the extra amount, if it were the *de facto* landlord as it has claimed to be in theory. Moreover, if the State were the real owner of land, and were as enlightened as it professes to be, it would not surely have allowed the people to go on sub-dividing the land and make the holdings uneconomic and thereby injure its own and their interests. These facts are sufficient to show the hollowness of the claim of the British Government.

However, the theory of State ownership, erroneous as it surely is, has not been without its influence on the Indian land revenue system. Curiously enough, the Government has used it not to improve the condition of the land or of the proprietors, but to maintain an unjust system of taxation and to oppose a much needed reform. Whenever, an attempt is made to get the small farmer's income exempted and to grade the land revenue to make it equitable, it is resisted by the absurd plea that land revenue is a rent and not a tax. On the other hand when a proposal is made to check the reduction in the size of holdings by subdivision among the heirs and to redistribute land on a rational and economic plan the rights of proprietors are pleaded in defence. Surely the Government cannot have it both ways. It ought to realise the absurdity of the position and to give up the untenable doctrine of Universal landlordship and to recognise that land revenue is a tax on agricultural incomes. Once this is done all opposition to regulating it on the same principles as the income-tax disappears. I hold it strongly that the Government has in the past done a grave injustice to the small peasant proprietors and has, for political reasons, shown a criminal mildness towards the large landholders. It ought to remedy the situation at once.

In this connection I wish to say a few words on the question of Permanent Settlement of the Land Revenue. I do not think there are many Indians to-day who regard Permanent Settlement as the one great way of solving the Indian Famine Problem or the Problem of Indian poverty as the late Mr. R. C. Dutt and many older Congressmen once did. It is now recognised on all hands excluding, of course, the landlords themselves, that the policy of Permanent Settlement was a great mistake, and that it has perpetrated a grave injustice. As Prof. K. T. Shah has said in his "Sixty years of Indian Finance": "Because the landed-class in Bengal is lightly taxed today....the rest of India has to bear proportionately a much heavier burden, all the more unjust since there is no corresponding ability to bear the increased burden." And Prof. Shah has proved it by giving facts and figures. The only question is: Whether the Government will be unselfish and strong enough to redress the wrong by the abolition of Permanent Settlement in Bengal and elsewhere? The assimilation of the land revenue into a system of taxes on income that I propose in this Paper will automatically abolish the Permanent Settlement.

III

Land revenue, then, is a tax on agricultural incomes and should therefore be assimilated into a general scheme of taxes on income. All ordinary taxes come ultimately out of income. At any rate, it is considered desirable that taxes should be so levied as not to encroach upon Capital—except, in special circumstances, such as at the time of property changing hands or at the time of a national crisis to meet some big item of non-recurrent expenditure. If the view presented here is accepted that the taxes should, as far as possible, fall on individual incomes—will it not be better then to raise them more directly *i.e.*, in the form of an income-tax? Except in those cases where national and social considerations make it necessary to employ the indirect method, the direct way of getting at the individual income seems preferable to me not only because the direct method leads to the taking of great interest in national affairs, to close scrutiny of national expenditure, and, as a consequence, to national efficiency and economy, but also because the direct method makes it possible to distribute the burden according to Faculty.

Some objections, however, may be urged against placing too great a reliance on taxes on income. It may, for instance, be asserted that expenditure on certain classes of goods (luxuries) is a better guide than income in ascertaining the capacity to pay. I have advocated the taxing of luxuries above for social reasons but I do not regard expenditure on luxuries as necessarily a better index of faculty than income. Many persons spend much more on luxuries than they can well afford, through sheer force of habit, or through ambition to shine in society. Whilst there are others who spend much less than their proper share on luxuries. How can then the expenditure on luxuries be regarded as a surer index of faculty than income?

Another objection that is likely to be urged against making income the main basis of taxation is that equality of income does not necessarily imply equality of faculty to pay taxes. The circumstances of men with the same income may vary greatly. One may be a bachelor, whilst the other may have a large family to support. One may be a man of simple tastes and frugal habits another may have very expensive tastes and habits. And even if the differences in tastes and habits are ignored, as they may well be, the existence or non-existence of dependents is bound to affect the capacity to pay. How can then income be taken as a basis for taxation?

The objection, however, is not a very serious one. It can be met by making due allowance for dependents. As long as the amount of the tax is small and the size of income sufficiently large, no great injustice is done by not making any allowance for dependents; but when the amount of the tax is appreciable and the size of income comparatively small it becomes necessary to give rebates for dependents. The same object is achieved, though not to the same extent, by exempting a higher minimum in the case of married than in the case of unmarried persons, as both the English and the American income taxes do. The American system exempts incomes below $1,000 in the case of the unmarried and below $2,000 in the case of the married. The figures are £150 and £225 respectively in the case of the English income tax.

The great merit of the income tax is that it can be graduated to fit the capacity of each tax payer. The usual way in which this is done is first to exempt a minimum, second to make the rate progressive, third to give abatements in case of the small incomes and fourth to make some sort of allowance for dependents. To make the sacrifice equal a distinction is also often made between "earned" and "unearned" incomes by taxing the latter at a higher rate than the former. An attempt has also been recently made to tax windfalls and exceptionally high incomes by means of super taxes. I do not think it is necessary for me to say anything by way of elucidation or justification regarding the above devices to make the income tax equitable. They are recognised to be necessary to any scientific scheme of an income tax and I propose that they should all be introduced in the Indian system, especially when it is modified to include agricultural incomes.

IV

The income-tax in India is of recent origin. It was first levied in 1860 for five years and was regarded as a novel and extraordinary measure, justifiable only in very exceptional circumstances. It was re-introduced in 1867 and again abandoned in 1872-3. Again an attempt was made in 1877 to introduce it in the shape of the License tax. In 1886-7 the license tax with modifications in the amount of the exempted minimum and in sharpening the rate of progression has continued in force ever since.

The exempted minimum has been gradually raised until it now stands at Rs. 2,000 per annum, which is not too low when compared with the minimum of £ 150 in England. However, no distinction is made between married and unmarried persons in this connection. It is, no doubt, true that this distinction is not of much practical importance in India, where marriages are contracted early and are almost universal. But a provision for dependents is badly needed, especially in the case of persons with incomes between Rs. 2,000 and Rs. 5,000 per annum. It is all the more necessary because in many cases a single income may have to provide maintenance for several sub-families in the joint family. This may entail some difficulties of administration, but once the justice of the proposal is accepted the administrative difficulties would soon be overcome and not allowed to stand in the way of putting it into operation.

Secondly, there is no system of abatements for small taxable incomes as we find it, for instance, in the English income tax. That puts these incomes at a considerable disadvantage, and I propose that their position should be improved by the introduction of a suitable system of rebates for incomes between say Rs. 2,000 and Rs. 4,000 per annum.

Thirdly, it is necessary to draw attention to the distinction between " earned " and " unearned " incomes It is of great importance from the democratic standpoint, also from the social and financial points of view. The principle of quality of sacrifice requires that the two should be taxed differently—the unearned incomes at a higher rate than the earned incomes.

Fourthly, the rate of progression needs to be sharpned still further. The higher incomes are not paying anything like what they ought to pay. It is a pity that the Government has not been courageous enough to raise the income-tax rate in the case of higher incomes. That would have given the Government the much needed money and would have saved her from taxing the poor man's salt still further.

The above remarks apply to the tax on agricultural incomes, which is to be substituted in place of the present revenue should henceforth be regulated on the same principles as the income-tax.

V.

The proposals put forward in the previous sections are likely to meet with opposition from various quarters.

To begin with the proposal for the assimilation of the land revenue into a general scheme of taxes on income is sure to be opposed by persons who still believe in the theory of State ownership or the rent-like nature of the land revenue. But I have already dealt with this objection above. The Government is likely to oppose the proposal for four additional reasons. In the first place, in the present circumstances, at the present stage of Indian political evolution, the big landlord is the natural ally of the Government and it is to him that the Government can look for help and support. How can then the Government displease him by adopting the proposal under discussion. Secondly, the Government may oppose the proposal on the ground that it leads to the breaking of promises. How can the Government break faith with the Zamindars of Bengal and other permanently settled areas ? It is not necessary to say much on this point. We are all familiar with the way in which Governments generally keep their promises. They have been known to break their pledges of more sacred nature than the one in question for less worthy purposes than that animating the present proposal. And, lastly, is not redressing a wrong, undoing an injustice, a sufficient justification for retracing a mistake? Thirdly, the Government may be afraid that the acceptance of the principle of graduation, with the exemption of minimum incomes, may lead to a diminution of the revenue from land. This need not be so. It is not at all difficult to raise the same amount of money from agricultural incomes as is at present raised from the land. My contention is that it will be done with greater justice with graduation than otherwise. But even if the adoption of the proposal leads to a temporary diminution, the loss can be made good in other ways, say by the imposition of death or inheritance duties. And even if the loss is left uncovered, is not the sacrifice worth making in the interests of justice to the hitherto oppressed classes? Lastly, the Government may oppose the proposal on the ground of impracticability. The income-tax in the case of non-agricultural incomes raises enough administrative difficulties and in spite of all care there are many cases of false returns or total evasions. Will not the difficulties be greater in the case of agricultural incomes, where many tax-payers are likely to be illiterate? I do not think illiteracy will stand any more in the way of the proposed tax on agricultural incomes than it has stood in the way of the present income-tax. On the other hand, the position is sure to be much better in the case of a tax on agricultural incomes, as the Government is already in possession of a whole mass of reliable statistical data relating to the income from land.

The strongest opposition to the proposal, however, will naturally come from the land owning class, especially of the permanently settled areas. But that is an opposition not based on reason or justice; its basis is vested rights and selfish interests. No arguments can meet this opposition. It can only be overcome by the might of the State.

We have to assign to the same category a similar opposition in regard to the proposed reform of the existing income-tax. The big industrial and commercial magnates are sure to denounce the proposals relating to the democratisation of the Indian income-tax. It is, however, not necessary to say anything about it here, except, perhaps to mention, that all the proposals in this Paper cannot be adopted at the present time ; they must await the democratisation of the Government.

There is, however, one objection that is worthy of serious consideration. An increase in the rate of income-tax on bigger incomes is likely to affect adversely the accumulation of capital, and, consequently to injure the productive power of the community. I do not think the productive power of the community will automatically decrease with the diminution of saving It is quite possible that new inventions may make production more efficient with less capital. At any rate, the relief afforded to the poorer classes, coupled with a wise expenditure of its income by the State is sure to increase the productive power of the community and to more than make up for any loss in productive capacity due to a decrease in the rate of saving. In any case the call of justice is clear. Justice requires that a portion of the burden should be shifted from the shoulders of the poor to those of the well-to-do.

VI

The burden of taxation in India has not been fairly distributed in the past. The well-to-do classes have not borne their proper share In order to remove this grave defect it is necessary to reform the land revenue and the income-tax as suggested above, and to introduce a tax on inheritances. Inheritance duties are now levied in almost all democratic countries such as England, Switzarland, United States of America, Australia Canada, etc. It is, therefore, not necessary to say here much by way of justification. Inherited wealth is in the nature of a windfall—an accidental income and consequently a very suitable subject for taxation. Sacrifice is the least in parting with a portion of it. This is the true basis of the tax, though the tax can be justified on other grounds as well.

The chief objection to an inheritance tax is that it is a tax on capital and not on income, and is likely to affect adversely the productive capacity of the people. That need not be so. The tax may actually come out of the income of the person inheriting the property. But even if the tax does fall on capital it need not decrease the productive power of the community. I have already dealt with this objection above in another connection and, therefore, it is not necessary to say anything more here.

In India inheritance tax has been opposed on another important ground. It is pointed out that Hindu Law does not recognise the conception of individual property, at any rate, as far as immoveable property is concerned. Immoveable property is held in common. It is the joint property of the male members of the Family. So there is no question of its passing from one hand to another ; and consequently no inheritance duty can be levied on it. This is merely a technical difficulty Surely, the property is held and managed by one person in the Family and at his death it passes into the hands of the next senior member, who becomes the manager. And a duty can thus easily be levied at the time of property changing hands.

Inheritance duties should be levied on the same principles as the taxes on income. They should be graduated according to the size of the property. In order to safe-guard the possibilities of hardship inheritance tax is generally levied, as in England, in two instalments A tax on the whole estate at the time of transfer, and secondly a duty on bequests. The inheritance tax is also graduated according to the degree of relationship. As the relation of the beneficiary becomes more and more distant the rate of the tax gradually increases. This is in keeping with the principle of least sacrifice.

Justice requires that a tax on inheritance should be introduced in the Indian Tax System and the balance between the poorer and the well-to-do classes restored.

THE FUNCTION OF THE INCOME-TAX IN THE FISCAL SYSTEM OF INDIA.

By

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The Indian Fiscal System has, since 1924, developed in two directions in a very remarkable manner. One is, of course, the striking growth in the yield of Tariffs, which became Protective even before the Government of India formally accepted the policy of Discriminating Protection. The future of Tariffs depends upon a number of factors, the exact effect of which it is not easy to calculate in advance, but it may be taken for granted that, on account of the insistent demand for Protection, the considerations of fiscal equity, so far as this source of revenue is concerned, will receive very scant attention. The Finance Ministers have everywhere found in the use of Tariffs an irresistible attraction, and in India the 'national' policy of raising revenue by putting up the tariff rates is going to be the line of least resistence for our Finance Members. They will, thereby, satisfy public opinion, and escape from the vexing want of pence. The other direction in which our Fiscal System has developed, since the War, is the increase of receipts from the income-tax and the recognition of its importance as a source of public revenues. The result has been brought about by the need for additional revenue for the Government, but incidentally this fact has brought a fiscal expedient to the fore, whose future will be determind by considerations of wider import. The role that the income-tax is going to play in future developments of our tax-system will be determined not only by its revenue-yielding capacity, but also by the fact that in it we will have the only means of redressing the inequality in the incidence of taxation. The object of reaching great wealth was prominently put forward by Wilson in 1860 when he imposed the incom-tax for 5 years, and again by Colvin in 1886, when he made it a permanent part of our fiscal system. But as no considered effort has till now been made to introduc a scientific and well-rounded tax-system in India, the requirements of fiscal justice, though never entirely over-looked, have been assigned a place of secondary importance in the fiscal policy of the Government. Inspite of the raising of the exemption-limit from Rs. 500 to Rs. 1,000 in 1903 and again from Rs. 1,000 to Rs. 2,000 in 1919, the introduction of the principle of graduation, and the imposition of a Super-tax, the desire for expanding public resources has been the most important determining factor of the successive stages through which the income-tax has passed since 1860. Now the time has come for widening the scope of this public impost. It will, of course, continue to be an important and growing source of revenue. But in its future developments, social considerations will receive as much attention as Fiscal; and in view of the fact that the constituents of the revenue system are likely to put a specifically greater burden upon the poorer classes a very important function of the income-tax in future will be to exercise a kind of compensatory influence on the development of the revenue-system as a whole. It is now admitted that the State should in its financial operations take into account the effects, which its policy in respect of raising and spending public money will have on the economic and the social progress of the people, and not rest content with a limited view of the matter. The view that a levy which is not primarily and mainly imposed for fiscal purposes is not a tax has been now discredited and need not be analysed or specifically rejected In India the income-tax will have to be made not merely an engine of finance, but also a means by which the ideals of fiscal equity and social justice may be realised. The tax system can not be used for curing all economic ills, but no means, whatever its limitations, can be discarded merely on the ground that it cannot accomplish everything

If this view of the proper function of the income-tax is correct, its theory and practice will merit a closer study on the part of the students of finance than it has received in the past. The attitude of the public towards the income-tax must necessarily be a factor of great importance in this connection. It will not serve any useful purpose to refer to past controversies, which caused a great flutter in our public life at the time of its first imposition. Things are far from ideal even now, but a certain measure of progress has already been attained, and the work of enabling the income-tax to force its way into popular favour is no more difficult in India than it is in other countries. We have already travelled a long way from the time when Laing characterised the income-tax as "about as bad and obnoxious a mode of raising revenues as it is possible to imagine in a country like India" or when Massey condemned the erection of machinery for the administration of the taxes as a standing menace to the people, who would regard it with extreme dread, horror, and repugnance. The difficulties of requiring the Indian people to submit their pecuniary affairs to the enquiry of the State, on which Trevelyan and Massey laid so much stress, have not been completely overcome but they are not insuperable, and can, with a trained agency for the adminstration of the tax and patience, be got over. There is one difficulty, however, to which Massey referred, and out of which it is not easy to suggest a way *i. e.*, the suspicion of the people toward their alien Rulers. The people, it is not necessary to say, are not in an excellent temper, and slight provoking causes may lead to serious consequences But that is a difficulty of the whole political system, and it is not necessary to lay special emphasis on it. The readiness to share public burdens out of one's own income pre supposes a standard of social ethics, which has not been reached even in the most advanced self-governing countries. This makes the administration of all taxes and specially of the income-tax a matter, which requires very great attention, and points to the conclusion that the fiscal measures should not be enacted unless there is reasonable prospect of administrative problems involved being successfully met. But there is nothing in the constitution of our society or the temperament of our people, which may hamper the chief revenue-authority in making full use of the income-tax for fiscal and social purposes. The least that can be said is that the public in India is now quite used to it, and it is possible to go further, and develop it in conformity with the trend of events all over the world.

The Income-Tax Act of 1922 marks a very important stage in the history of Indian finance. The Income-Tax Act of 1918, which has been repealed by the passage of the new measure, had already altered the procedure entirely, and made it necessary for every assessee to make a return of his income on the prescribed form. In some of the Provinces a special collecting agency had been brought into existence with very satisfactory results. But on account of the financial settlement based on the complete separation of the Provincial and Central resources, and the assignment of the Income-Tax to the Central Government, a complete revision of the Income-Tax law became necessary to remove the defects, which the experience of the working of the Act of 1918 had revealed, and to centralise its adminstration. Very great care was taken in framing the measure Local Committees were appointed in each of the major Provinces to put forward suggestions for the amendment of the Act, and after the recommendations of the Local Committees had been collected, a Central Committee was constituted composed of the representatives of the Local Committees to further consider the Reports of the latter. The bill, as it was finally placed before the Legislature, was the result of the deliberations of this Committee. The Legislature passed it without any important changes, and it now forms the basis of the operations of the Income-Tax Department, which the Act itself has created, and on the efficiency of which its success depends so largely. In view of the necessity of making the income-tax a make weight to other taxes, and an effective instrument of finance it is necessary to consider the provisions of the Act a little in detail, to point out its chief features, and to call attention to its shortcomings.

The starting point of this analysis must be the consideration of the taxable income. It is well known that Economists and students of the Science of Finance have found it extremely difficult to define 'income'. Prof. Felix Flugel made an examination of all or nearly all the Income-Tax laws of the world for the express purpose of finding out how they defined 'income' and the conclusion to which he came (and which has been quoted from his unpublished manuscript by Prof. G. C. Plehn in his article on "Recurrent and Consumable Receipts" in the American Economic Review of 12 March 1924) is that "in most of the Income-Tax laws in force at the present time a definition of income is not to be found. The net taxable income is to be determined by an enumeration of the taxable and non-taxable receipts." That is also true of the Act of 1922 in India The omission of a general covering definition is not the result of accident. It is deliberate. As a matter of fact one of the reasons why the revision of the Act of 1918 was considered necessary was that the meaning of the word 'income' according to the ruling of a High Court gave rise to embarrassing difficulties and Section 3 of the old Act had to be altered on the lines of the English Income Tax in order to provide that income-tax should be charged not in incomes but in respect of incomes, profits, and gains descibed in the schedules and special sections of the Act. Section 4 and the Sections 6 to 12 of the Act set out the receipts which are liable to income-tax. They are classified in six schedules, viz :—salaries, interest on securities, property, business, professional earnings, and other sources. In the description of the several classes of incomes several important points have been kept in view. No attempt has been made to give a wider significance to the conception of income than it bears in the ordinary life. The framers of the present law adhere to the conception of actual money income. On account of the impossiblity of measuring what is called the psychic income or, to use the words of Prof Seligman, " the pleasurable sensations or the usufruct that flows to the individual in the shape, not of money, but of money's worth,' the ordinary meaning of income has been accepted. To this, however, there is one exception. The real addition to income, which takes place on account of the fact that an individual lives in his own house, or has the benefit of a rent-free residence has been included in the taxable income. The reason for this departure, is, of course obvious. The satisfaction, which an individual derives from living in his own house or one for which he has to pay no rent, can be easily measured in terms of money, and therefore can be included in income. The other important point which has to be noticed is that anticipated recurrence has been accepted as an essential characteristic of income. All casual gains, which are not the proceeds of a profession, vocation or employment, and are not annual have been exempted. The administration of this provision is likely to be a little difficult, and will lead to the exemption of 'windfalls', a matter with regard to which there can be a legitimate difference of opinion but the exclusion of irregular and non-periodic returns is in harmony with the ordinary conception of income. The third point, which calls for mention in this connection, is that a very careful attempt has been made to distinguish gross from net income, and it is the latter which determines the liability of an assessee to the payment of the tax In case of incomes from which business deductions are allowed in respect of depreciation, insurance premia, repair charges, interest on capital, borrowed or raised by debentures, and similar other items of expenditure in order to calculate the taxable income. For the incomes derived from professions, property and other sources allowance is made for charges, which are made solely for the purpose of earning the income. The personal expenses, which can by straining the meaning of business expenses, be included as a part thereof, have not been exempted. With regard to most of the items for which deduction is admissible, there can be no controversy. It is obviously fair that they should not be included in income. But there is one item for which allowance is made for ascertaining the taxable income, and regarding the propriety of which some doubt can very well be expressed. Interest payable on capital raised by Corporations by debentures is to be deducted for assessing their taxable income. It is true that the debenture holders are the creditors of the Corporations, but the debt of the Corporations raised in this way does not diminish their capacity to pay taxes. As Prof. Seligman has pointed out at several places in his writings, the bonded indebtedness of the Corporations is not a burden in the same sense in which the individual indebtedness undoubtedly is. It is in reality an integral and constituent part of capital, and actually enhances their faculty. It is from this point of view a mistake to deduct interest on debentures from the gross receipts of the Corporations. The last point which need be noticed here is that a very clear distinction has been drawn between capital and income and all receipts which are in the nature of the return of capital have been exempted from taxation. For the same reason no deduction is permitted in respect of capital expenditure and investments. Savings have been treated as a part of income, and the difficulty which has been experienced by some Economists in including them in income on account of their 'standing in space' has been rightly ignored by the authors of this measure, otherwise income-tax, instead of being a tax, on income, would have become a tax on expenditure—a basis which has been discarded every where on account of its inadequacy under modern conditions

The Act applies to all incomes which arise, accrue or are received in British India. The tax is payable by individuals, companies, registered and unregistered firms, and Hindu joint-families. The

Super-tax, which has been defined as "additional duty of income-tax," is also assessed on individuals, companies, unregistered firms and Hindu joint-families when their incomes exceeds a particular amount—registered firms being exempt from its payment. It is also imposed upon non-residents in respect of incomes, which they derive from their business connections with India. Persons liable to income-tax in other countries do not get any relief from the Indian Income-Tax, the only exception being the asesses, who are liable to the British Income-Tax. The latter are entitled to an abatement when the Indian rate is in excess of half the British rate. The Indian Income-Tax, it would thus appear, is a comprehensive levy. It is applicable to all persons, real and legal. The Corporations which in several countries are taxed separately, are here treated as individuals, and pay the tax as such. The Hindu joint-family is also taken as a separate taxable entity, and is liable to the tax in that capacity As further experience is gained of the working of the law, it will probably be necessary to differentiate between natural and artificial personalities, and apply different principles of taxation to what are after all fictitious entities. The Corporations and the joint-families, if the latter continue to be a living factor in our social life for any length of time, will have to be subjected to special forms of taxation But for the present the measure is sound as far as it goes, and is adequate for all practical purposes.

The question of exemptions may be considered next. The Act of 1922 follows the provisions of the preceding measures and grants exemption to agricultural incomes, on the assumption, that as they are liable to land revenue, their assessment to income-tax would lead to double taxation, and would, on that account, be inequitable. That is the most important exemption allowed under the Act and its legitimacy is discussed below. The exemption of incomes below Rs. 2,000 is in accordance with practice of other countries and is held valid as the amount is considered to be equivalent to that needed to support a family on the very lowest scale of decent subsistence. It is now approved by all writers on the theory of the subject, and has been embodied in the revenue systems of all countries of which the income-tax is an important constituent. But though no exception can be taken to the principle exempting a minimum of subsistence, the particular figure at which the exemption has been fixed here is likely to give rise to a difference of opinion. It can be maintained that the limit has been set too high. In a country in which the standard of living is indescribably low and the average income of an individual exceedingly small, it is difficult to contend that the amount of Rs. 2000, even in these days of high prices, is just sufficient for decent subsistence. The considerations of administrative expediency have however, to be taken into account. In 1919, the year in which the minimum was raised from Rs. 1000 to Rs. 2000, the change gave relief to no fewer than 2,37,000 assessees out of the total number of people, 3,81,000, who were paying the tax at that time, and what is more significant, out of a total collection of 9·34 crores in 1913-19 the amount contributed by persons whose income was below Rs. 2000 was only 50·73 lacs. These figures are a very strong argument for keeping the exemption limit where it stands at present. It is of some importance to remember that this exemption, though expedient on account of the heavy cost of collection and other reasons can not be justified on its own merits. The exemptions of the profit of the Co-operative Societies, and the incomes of the Religious, Educational and Philanthropic Institutions are justified on higher grounds, and it is not necessary to say anything about them, though it is well known, that on account of the absence of proper management of most of the religious institutions, their income, though nominally devoted to religious and charitable purposes, is actually spent for the personal expenditure of those who are in charge of the institutions, and ought not therefore, to escape taxation. Abatements are also allowed in respect of Life Insurance premia and the Provident Fund contributions upto the maximum limit of the one sixth of the total income. There is one other exemption, which, though not very important in itself, calls for a passing comment. The leave allowance or salary paid to officers on leave or on duty in the United Kingdom, whether paid in that country in sterling or by means of a negotiable draft on a bank in India, are not liable to the Indian Income-Tax. These incomes arise in India in every sense of the word, and it is difficult to find any valid reason for their exemption. There are also some other exemptions, but they are not important, and their propriety can not be questioned on theoretical or practical grounds.

The assessment is the most crucial part of the administration of income-tax. Many an ideal scheme has not worked well in practice on account of the difficulty of reaching incomes liable to the tax. The methods of assessment for which the Act of 1922 makes provision are likely to give good results, if they are used by men who have the necessary ability and experience. They seek to combine the advantages of what is called 'taxation at the source' and the 'lump-sum' tax. The total income of the assessee from all sources determines his liability to the tax and the rate at which it is to be assessed. The Principal officers of Companies are required to submit returns of their total income in the last accounting period before the 15th June every year. The firms and the individuals get notices from the officers of the Income-tax Department requiring them to furnish returns of their incomes within 30 days of the receipt of the notices. These returns are then examined by the assessing officers, and if the latter is satisfied with them, he assesses the total income and determines the sums payable by the assessees on the basis of these returns. If, however, he has reason to believe that the returns are incorrect or incomplete he has power to call for accounts or any other evidence in support of the correctness of the return. On the basis of this evidence he assesses the liability of the persons concerned, and determines the amount due from them. Failure to produce the accounts or submit the prescribed returns makes them liable to certain penalties—the most important of which is the forfeiture of the right to appeal against the assessment of the officers, who have then, as a matter of necessity, to make assessment according to the best of their judgment. In making the assessments profits, gains, incomes of the previous years, which is taken to mean the year ending 31st March preceeding that for which assessment is made or the fiscal year which the assessee is in the habit of using as his accounting period, are taken into account. The system of adjustment, which the Act of 1918 had introduced, has been done away with. Under that system a provisional assessment was made on the basis of the income of the provious year, and adjustment was subsequently made when the actual income of the year was ascertained. The system, though theoretically superior to that which has been introduced now, did not work well in practice. It was not well understood by the amateurs, who had to adminsiter the tax, and when it was understood, it increased the work of the collecting agency without any commensurate advantages to the State or the assessees

Now the assessments are finally made on the basis of the ascertained income of the provious year. The system of assessing the incomes in their entirety is good in as much as the payment of the tax can be more closely adjusted to the ability of those on whom it is levied, but for its success it requires an admirable administrative system, and officials free from the spirit of bureaucratic interference. In order to prevent evasion or under statement of income, and obviate the necessity of ascertaining the whole income of the assessee from his personal declaration, tax is deducted at the source by the disbursing officers of the Government, local authorities, associations, companies and also by private employers. The amounts so withheld are treated not as payments of the tax at the source, but the deduction of the tax at the source, *i.* they are treated as payments of the tax on behalf of the persons from whose income it is deducted and who get credit for these amounts when the final assessment is made. The rate, at which the tax is assessed, is determined by the estimated income of the assessee, and is subject to adjustment when the total income from all sources is ascertained. If it turns out that the amount paid on their behalf is in excess of that which is rightly due from them, the difference can be refunded, when the return of the total income is submitted. In this way the advantages of both systems can be realised and their difficulties avoided. The super-tax being a levy, the rate and the amount of which depends upon the total income of the assessee, cannot be deducted at the source. It is directly assessed and recovered on the basis of the annual return of the total income. The companies have to pay the additional duty at a flat rate of one anna per rupee and the individual share-holders can claim and get a refund, if they can show that their total income does not warrant their assessment at this rate.

The Act merely deals with the methods and the procedure of assessment and collection of the tax. It does not lay down rates. They are determined by the Finance Act every year. Since 1916-17 the principle of graduation has been accepted as an essential feature of income-tax in India, and has led to the application of higher rates to larger incomes. It is significant that the introduction of the principle of progressive taxation has created no resentment. A measure of fiscal reform, which even in a country like the United

Kingdom had to be carried through after a great deal of waiting and organised effort, has been adopted here without any difficulty. Its fairness, expediency, and convenience is admitted by all, and it is now a permanent element of our fiscal system. It was at one time maintained that the adoption of progressive taxation would lead to the abandonment of collection at the source.

The experience gained in India and elsewhere during the war has shown that it is possible to retain collection at the source and also apply graduation. The general acceptance with which the principle has met in India has a moral of its own for the future. The fiscal reformers have of course, to pay due heed to the state of public opinion, and be very careful in making changes for which the people are not prepared. But it is also possible to go to the other extreme, and hold back the necessary measure of reform for want of imagination and daring both of which are essential to accomplish anything that really counts In the reconstruction of the tax-system in India, we have to bear this in mind, and not listen to the prophets of ill who imagine all kinds of evils, because the public interest requires the sacrifice of the privileges, which they have been enjoying to the detriment of the higher good of society as a whole.

The most important achievement of the Act of 1922 has still to be mentioned. It has created a special agency for the assessment and the collection of the tax In each Province there is a Commissioner of Income Tax, who has under him two or three Assistant Commissioners and a number of Income-Tax Officers. The actual work of assessment and collection is done by the Income-Tax Officers. The Assistant Commissioners dispose off appeals against their assessment and generally supervise their work. The Commissioner is in charge of the whole administration of the tax in the Province. Over the Provincial Commissioners is the Board of Central Revenue, which is the chief authority for the administration of all sources of central revenues. It makes rules, interprets them, and co-ordinates the work of the provincial organisations. Before the enactment of this law most of the work of assessment and collection was done by the District Officers and their assistants. It is a matter of common knowledge that the ordinary Revenue Staff was quite unequal to the work, for which they had neither time nor requisite training and experience. The Central Committee recorded their emphatic opinion that the success of the new law would depend upon the oppointment of officers of the highest integrity and training. All the world over very great attention is being paid to administrative considerations. It is being realised that the question of efficiency, to use the words of Prof: Seligman, "is scarcely, if at all subordinate to the question of justice "An ideal perfection of theory for the execution of which an adequate administrative system cannot be erected is much worse than a realisable programme of practical efficiency which can be made to work in actual life. The absence of an expert staff has till now been a great hinderance in the successful administration of the income-tax in India. The Act of 1922 seeks to remove this defect, and though the creation of a really efficient agency must take time, the recognition of its importance is a step in the right direction. Whether the new law will work well or ill will depend not so such upon the essential principles which have been embodied therein, though their great importance cannot be overrated, as upon the efficiency and integrity of the Department which it has brought into existence. It is necessary to safeguard the interest of the Treasury on one hand and provide against inquisitorial procedure on the other. The only way in which both of these objects can be realised is to develope a system of organisation, that will err neither on the side of undue rigour nor that of excessive laxity. The Indian Income-Tax, it cannot be too often repeated, will not become the fiscal and social engine that it ought to be, unless the officers, who have to administer it know their work and do it honestly and well.

Our experience of two years of the actual working of the new law is too short to enable us to generalise on its results. The work has just begun and it is being carried on under great limitations. Most of the officers of the Department are entirely new to their work, and the assessments are being made by men who expect to qualify themselves for their duties by actually performing them. The organisation has not been completed in some of the Provinces, and even where full recruitment has been made, it is felt that a great deal of experience has to be acquired before the officers can have full confidence in their own capacity to do their work with efficiency and justice, and can inspire a similar confidence in others. The need of keeping the Department clean is admitted, and is being kept in view in its administration, but how far this essential condition has been fulfilled in actual practice cannot be known from the published Reports.

From facts, which are within the knowledge of almost all of us, it appears that there is considerable room for improvement in this respect. The public has, on its own part, to get accustomed to the working of the law. The returns submitted in most cases either do not give full information, or give information which cannot be relied upon. There is great reluctance to produce accounts. The reason sometimes is that the accounts are not kept, and therefore cannot be produced, but oftener the failure to produce accounts is due to the disinclination of the assessees to reveal their private affairs, for fear of losing their credit, should real financial position become known to others. In some cases the assessees gamble on the result of the assessment. If it is in their favour, they keep quiet about it, and if it is in excess, they make use of every possible means for getting it cancelled. The payment of the tax is put off as long as possible. The Act of 1922 is an intricate enactment, and inspite of the issue of the Income-tax Manual the assessees do not understand its details, and fail to do their duty, as often for want of knowledge, as on account of unwillingness to make their rightful contribution to the public exchequer. These difficulties exist, but still the results are decidedly reassuring. The Income-Tax Officers have, inspite of their inexperience, done well so far. The number of assessees and the yield of the tax have been increased, and this result has been achieved notwithstanding the fact that a large number of persons have, in several cases, been released from the payment of the tax. It used to be stated frequently in the former Income-tax Reports that small men tend to be overassessed and big men underassessed. The more thorough enquiries made after the introduction of the present Act show that this view was correct, and it is anticipated that the tightening up of the procedure is likely to bring bigger fish into the net. The assessments are now conducted with less respect for persons, and made on the basis of well-ascertained facts. House to house surveys have been instituted in the big towns, and have produced good results. This has led to the increase of the demand in urban centres, and a large number of property owners, who till recently escaped taxation, are now no longer enjoying their undeserved immunity. The Department can never be popular, but it is, in some Provinces, gaining the confidence of the people The disinclination to produce accounts is decreasing, and assessees are realising that it is safer to keep and submit correct accounts than let the assessors determine their liability on the basis of their estimated income. These results, though not very striking, justify our taking a mildly optimistic view of the future of the Income-Tax in India.

It is now possible to examine the defects of the Act. Its most outstanding defect is the exemption of agricultural incomes. No attempt has been made to assimilate land revenue to income-tax. The authors of the Act had no choice in the matter. According to the Meston Settlement, which they could not upset, land revenue had been assigned to the Provinces and was to be administered by them. They could not change its basic principles or make regulations which might give rise to conflict between the Central and the Provincial Governments. But from the point of view of scientific theory, the exclusion of agricultural incomes from the operation of the Act cannot but be regarded as one of its most important defects. Leaving out of account for the time being the important question of the distribution of resources between the Central and the Provincial Governments, it may be stated that from the standpoint of theory it is no longer possible to apply one set of principles to the administration of income-tax, and another to that of land revenue. It is time that the Government should recognise that land revenue, whatever its antiquity, is an anachronism. It is a tax on things and not persons. It does not take the circumstances of the assessee into account. The same rate is applicable to the rich and poor alike. The lowest incomes are taxed. The administration of the levy is vexatious, and its yield inelastic. It will not do to refer to the seigniorial rights of the State, if the exercise of these rights is manifestly against the accepted principles of the Science of Finance they must either be abandoned or their use brought into harmony with the requirements of justice. The incomes of the farmers and landlords are everywhere liable to income-tax, and the difficulty of assessing them is no greater than that of assessing the incomes derived from business and professions. It is necessary to change the whole system of land revenue in India. The landed interests in the various Provincial Legislatures are striving to increase the period of settlement, reduce the maximum proportion of net produce which the State can take, and the pitch of individual enhancements. They are working to get some relief for themselves on the assumption that the essential principles of the existing system are to remain intact. It is beyond the scope of this Paper to discuss the issues that have been raised by these demands or say how far they are just. It is not necessary to do so if it is accepted that the whole system has to be recast. The essential purpose of reconstruction must be to make land revenue a tax on agricultural incomes The lowest incomes should be exempted, and if that is done the general taxable minimum should be lowered, as the limit of Rs. 2000 will release far too many people from the payment of the tax, whose relative capacity to pay is too obvious to justify their exemption. The principles of progression and differentiation should be introduced and the rise in the rates should be made more steep in order that the bigger landlords may not get any relief. The absentee landlords should be taxed at a higher rate in order that they should either become gentlemen farmers or go out of agriculture and make room for those who can bring capital and enterprise into the industry, both of which it needs very badly. It may not be unfair even to go further and take from the substantial landlords not only the income-tax but also the present land revenue. According to the capitalisation theory the liability to land revenue has been taken into account and allowed for by those who have purchased land recently, and, therefore, have shifted the burden of the levy once for all to the original owner For them the payment of land-revenue is not onerous, and it is, in theory, quite legitimate to make them liable to the payment of both land-revenue and income-tax. In practice, however, it will not be easy to distinguish between the landlords, who have been in possession of their estates for a long time, and those who have purchased them in recent years.

It will be sufficient if they are made liable to high differential rate of income tax and the fact of their belonging to an order, which has no future is brought home to their minds. Their contribution to the Treasury not only should not be fixed in perpetuity, but should be made liable to annual revision according to the changes in the rates of income-tax, and the actual yield of land reckoned at the market prices of the year. It should not be difficult to ascertain agricultural incomes every year. With an elaborate system of cadastral surveys and records of rights (which will have to be maintained in order to regulate the relations between tenants and landlords), and in view of the fact that only incomes above a particular minimum will be taxed, this aspect of the matter should not present any serious difficulty. In putting forward this suggestion it is not overlooked that this reform, if given effect to will mean a considerable reduction of the revenue which land contributes to the public Treasury. It is not possible to calculate its financial effects, but it is certain that as it seeks to exempt the small man, it will wipe off not an inconsiderable portion of the income which the Government gets from this source. This is a serious consideration, and likely to damp the enthuasiasm of the most ardent fiscal reformers. This course means that the radical change advocated here cannot be introduced in the immediate future on account of the straitened state of national finances. This is not the only fact which puts it out of the realm of practical politics. There are others which can not be considered here. The point which has to be emphasized is that it is absolutely essential for the introduction of a scientific income-tax or rather a scientific system of taxation in India, the whole land revenue system should be thrown into the melting pot and reconstructed on a new basis. It is a relic of the times when economic life was simple, and a tax on the produce of land collected in kind, and sometimes varied according to the needs of the State answered fairly well the demands of administrative efficiency and fiscal equity. The change in the economic basis of society and the need for realising a higher ideal of justice in the tax system of the country makes its complete revision a matter of imperative necessity. The reform may not be practicable just now but that it is desirable should not give rise to any divergent view among the trained students of the fiscal systems.

The other defect of the measure is not the result of circumstances over which its framers had no control It is a deliberate omission, and the result of excessive conservatism. The defect is that it does not introduce the principle of differentiation, that it makes no distinction between earned and unearned incomes. It treats all incomes alike. It is not necessary to discuss the pros and cons of the whole question. The fairness of distinguishing between incomes which are derived with and without personal exertion admits of no doubt. The principle has been introduced in the revenue system of a large number of countries. The unearned incomes may arise from property, real and personal, or be the result of social environment. When they are due to the latter cause a very high rate of tax is necessary to meet the requirements of justice. The increase in the value of land which takes place in every country on account of the growth of population and general social progress is the classical example of unearned income. During the war colossal fortunes made out of the misery of humanity naturally attracted attention and were subjected to a special form of taxation. Now it is recognised that even in times of peace incomes arise, which are the result of the fortuitous concourse of events, and a desire to earn them does not constitute a motive for economic effort. They ought to be discriminated against in every good system of taxation. The administration of a differential rate of tax creates complications It is not easy to draw a sharp line of distinction between earned and unearned incomes, and again between incomes which accrue from investments and others which are the result of social causes. The principle has, therefore, to be applied with great care in the beginning and confined to large incomes, which are obviously unexpected or accrue without personal effort. The Act of 1922 does not take the qualitative differences of incomes into account, and to that extent is not in keeping with advanced fiscal theory and practice.

The third defect of the Act of 1922, which is important enough to deserve special notice, is its failure to provide for proper administrative methods so far as the assessment of ordinary business incomes is concerned. It is a notorious fact that business incomes and professional earnings in India have since the first imposition of income-tax been under assessed. The methods of assessment before 1918 were crude to a degree. The assessment was based on certain presumptive indices of wealth, and though sometimes men with very low incomes, who happened to incur the disfavour of the revenue underlings, were assessed to the tax, more often substantial men escaped taxation, and persons in receipt of salaries and interest on securities contributed a disproportionately large share of the total yield of the tax. The position has improved since 1922, and business incomes are being assessed more thoroughly. But it is still unsatisfactory. In the Punjab alone according to the estimates of Mr. Darling, the money lenders who are being assessed to 2 crores of income have an actual income of 9 crores. They are, if this estimate is correct, not paying one fourth of their legitimate contribution The lawyers are also difficult to assess, and are being taxed in the same Province on 45 lacs, an amount which evidently undervalues their total earnings. It is impossible to give even a rough idea of the aggregate income of the country, which is, on account of under-assessment, evading taxation, but it may be taken for granted that it is large, and that yield from this source, if proper methods of assessment can be evolved and enforced, is capable of great expansion The difficulty is fundamental Schedule D of the British Income Tax is, as the students of the subject know, perhaps the one part of the tax in the administration of which the success attained falls short of the British standard of efficiency. But in the United Kingdom the difficulty has been overcome to a very large extent by making use of the agency of Land Tax and Additional Commissioners for the original assessment of the tax. Wilson in his Act of 1860 made a salutary provision for the assessment of business incomes with the " aid of a Special Commission, to whom the traders may apply to be assessed without their returns going through the general commission or the public-office ". He expected that by this means, the extremes of ineffectiveness and inquisition would be avoided. Referring to this safeguard he said " By this means we hope to shape the practical working of the tax through the aid of punchayats and by using the instrumentality of heads of towns and trades under the supervision." It is not known how far this arrangement was actually carried out and what its results were. But since 1886 no attempt has been made to enlist the support of any local agency in the assessment and collection of the tax. The practicability of this system depends upon the public spirit of those whose co-operation is sought for the smooth working of the administrative machinery. Unless they are animated by a high sense of duty, and look upon this service as a valuable privilege, it is not easy to get good results from the inclusion of the non-official assessors in the administration of the income-tax. Spasmodic attempts have been made in certain parts of the country to assess the tax originally on the incomes of certain self-selected groups, and then let small committees composed of the members of the groups apportion the total contribution among the individual members, but they have proved unsuccessful, partly on account of the difficulty of ascertaining the incomes of the groups themselves, but mainly on account of the unedifying practice of their richer members of putting an unduly heavy burden on the backs of those who could ill-afford to bear it It can not be said how far the experiment of having a body of men, who should perform the function of the Additional Commissioners in the Income tax adminstration of India could succeed under present circumstances. In the prevailing atmosphere of suspicion and distrust, which makes co-operation with the Government in any form a highly anti-national act, it will be difficult to secure the services of men who would assist the Officers of the Department in the fair assessment of their fellow citizens. The work is not likely to attract the right kind of men, who may be relied upon to discharge their duty without fear or favour. Inspite of these difficulties it must be stated that self-assessment even when scrutinized by official experts, is no assessment, and unless some arrangement can be devised for removing this defect business incomes will evade taxation. It is easier to point out the defect than suggest the remedy, but its recognition will facilitate the discovery of the latter. It may, therefore, be stated that the Act in failing to provide the proper administrative machinery for the assessment of business incomes has left a loop-hole which has to be filled up, if its efficient operation is to be ensured.

There are other minor defects of the Act which it is not necessary to specify or dwell upon at length. It does not permit any abatements in respect of children or dependants, and therefore imposes a heavy burden on men with large families. Persons, whose incomes, are above the taxable minimum have to pay tax on their entire income, and though it has been provided that no one whose income is just in excess of the taxable minimum or of one of the stages of the Finance Act should be worse off after the payment of the tax than he would have been had his income been below the minimum or below that particular stage, it would have been fair to exempt the minimum altogether upto a certain limit and then progressively reduce the abatement till a fairly high limit is reached These and some other defects would have been easily avoided if the social aspect of the law had received as much consideration as the fiscal. As it is, they cannot be revised till the revision of the law is made inevitable by the fiscal exigencies of the Treasury or the pressure of enlightened public opinion.

Taking the law as a whole it must be pronounced as an intelligent and fairly successful effort to make income-tax a much more important constituent of the revenue system than it has been in the past. Its shortcomings can not be ignored. They are serious and will have to be rectified. But the improvements which it has brought about are considerable. It has given us a more workable definition of taxable incomes. Its exemptions are in most cases fair. The combination of the system of the 'stoppage at the source' with the application of the principle of graduation is in accordance with the fiscal practice of the most advanced countries. The provision of an entirely new administrative system is its most important and commendable feature. It may be hoped that with the passage of time, the education of public opinion, and what is perhaps most important the clearing up of the political horizon, its working will pave the way for the enactment of another measure more equitable in principle and smooth in operation. The present law may be taken as an important landmark in our fiscal history.

DISCUSSION ON PROF. GURMUKH SINGH AND PROF. GYAN CHAND'S PAPERS

Professor James Kellock said :—

" I would like to say a word with regard to the land tax. Inspite of the condemnation of it in some of the Papers presented to the Conference, I think Economists should pause before committing themselves to the opinion that the source from which an income is derived is a matter of indifference. The real issue underlying the controversy as to whether the land revenue is to be called " Rent or Tax " is not whether the Government is rightly to be regarded as the ultimate land-lord or not, but whether there is such a thing as *Economic Rent* or not. If there is real economic rent in the income derived from the land, then it is both justifiable and expedient that the State should get a slice of that Economic Rent, because its existence is due not to the effort of the individual but to communal circumstances, and because a tax that falls on real economic rent is the least oppressive form of taxation. The question therefore is this,—"Is there Economic Rent available in the case of the ryot's land ? " The existence of economic rent is evident in the case of England where you find land-lords owning lands of varying degrees of fertility, and where the farmers compete for the use of these lands. The farmers have an average standard of earnings, and they are willing to pay a high rent for the use of a piece of land, if its productivity is such as will enable them to maintain that standard of earnings."

" In India the method of arriving at the assessment of the land for taxation is by endeavouring to discover what is the relative fertility of the particular areas, what is the condition of prices, what benefit has accrued from public works and so on. This method clearly indicates that in assessment the attempt is made to determine the economic rent of the areas under settlement. If economic rent does exist, and if it can be determined, then the principle is good that the State should get a part of it. Suppose the State were to remit the land revenue, I question if the cultivators could get the benefit. Would the benefit go to the private landlord or the middle man—would it not indeed lead to the creation of a private landlord where such did not exist ? If so, the private land lord might put the money back into the land to a large extent, but there is no assurance that he would do so. I imagine that an alert State—i.e , a State sensitive to an enlightened public opinion—would be more likely to do so. "

" Therefore the land-tax of India seems to me to be in principle sound, but there are two provisoes that must be observed in its operation if it is to be sound:—

(1) Before beginning to reckon economic rent sufficient allowance must be made for the expenses of living of the farmer

In a country where besides farming there is little or no alternative industry, and where the chief taker of rent is the State and not competitive landlords, the matter of the standard of life of the rent-payer cannot be left to merely automatic competitive adjustment. What therefore is required is exemption from land-taxation of the farmer of land which can yield only a few hundred rupees a year—i.e., the recognition that such land is no-rent-land.

(2) The state must practise *good* landlordism, i.e., it must see to it that an adequate share of the land revenue is returned to the land, is expended in ways that will make the land more productive, in ways that will raise the farmer's standard of life, and in ways that will make the farmer a more effective agent of production."

Dr. Matthai opposed the idea that direct taxation was a necessary accompaniment of citizenship, because some of the most valuable contribution which a citizen may make to the State may take the form of service He was for reducing the limit of exemption in income-tax. The real objection to a reduction is that the cost of administering the tax may increase disproportionately. But he thought that in some Provinces where the number of assessees is not likely to be large the cost of administration might not be prohibitive.

Prof. R. M. Joshi said :—

" I am in complete agreement with the general argument in Prof. Singh's Paper. A great deal of confusion of thought has arisen in this country out of the controversy whether land revenue is a rent or tax. Poor Ricardo never imagined that his theory of rent would be utilised as it has been in India. Suppose there is a holding of half an acre which is cultivated entirely by hired labour and proper accounts are kept of all the in-comings and out-goings in connection with it during one season. Suppose the harvest got out of the holding fetches Rs 25 in the market and all the expenses of production together amount to Rs. 15 ; there is a clear surplus of Rs. 10. Supposing now that the holding belonged to a cultivator who tilled it himself, would it be equitable to claim the whole or part of Rs. 10 from him as land revenue on the ground that it only meant claiming the whole or part of economic rent ? Does that not assume that the wages of cultivation of a holding of half an acre are equivalent to the maintenance of a cultivator and his family ? And would not such an assumption be hopelessly wrong ? Yet so many of the holdings are of that microscopic size and, further, are not to be found in one block but are made up of a number of scattered strips. In other words, Ricardo's assumption that the wages of cultivation would equal at least the minimum of subsistence does not hold good in many parts of India. Hence the controversy whether land revenue is a rent or a tax is almost meaningless and off the mark. The fact is that even if the land revenue were entirely abolished many cultivators would still find themselves below the subsistence minimum. If land revenue were amalgamated with income tax, and a subsistence minimum were exempted from taxation, the major portion of the present land revenue would probably disappear altogether. But in that case it would probably re-appear under another name viz a local rate on the annual value of immovable property without any exemption limit. That is what happens in England. What this means is that our land revenue is really of the nature of the local rates in England. If the land revenue were entirely spent in the rural areas on education, sanitation, medical relief, rural public works etc. as if it were a local rate, most of the complaint about its burden and injustice would probably disappear.

P. S. Lokanatham said :—

" I do not agree with the suggestion that the existing method of raising land revenue shonld be abandoned and that land revenue should be merged in a general scheme of income-tax. Apart from the difficulty of fixing a suitable exemption limit and of making good the deficit that would be caused by such a change, the proposal is in my opinion uncalled for. Land revenue in India is not only justified, because in a predominantly agricultural country like ours, the State must derive a large measure of its income from the agricultural industry, but also because of a real difference, socially speaking between income from land and income from other forms of capital. There is an " Economic Rent " accruing from land, and a tax on it will have less serious effects than a tax on income from other investments. What is wrong in the Indian tax system is not so much that so much revenue was raised from land but that very little was actually spent in developing rural life. It was this latter factor that had affected adversely our agricultural population and not the former. I am therefore in favour of retaining land revenue as it exists at present with a few minor changes. Income tax in India must not only be the complement of land revenue as it is now but must be a co-ordinate tax touching agricultural incomes also. I plead in favour of reserving a large portion of the revenue from land to be specially utilised for the development of rural life.

Concluding Remarks by Prof. Gurmukh N. Singh.

"Prof. K. T. Shah, and, to a lesser extent, Dr. John Mathai have passed strictures on what Prof. Shah had called the " cash nersus." Prof. Singh agreed with the remkards made by Prof. Hamilton in this connection. He could not accept the proposal of Prof K. T. Shah to confiscate all incomes above Rs. 50,000 a year. It was too socialistic for him, and he considered it unsuitable to the present conditions of the country. Prof. Singh agreed with Prof. Joshi as to the advisability of associating local, non-official persons with the work of assessment and collection of taxes. It was pointed out by Prof. Hamilton and Prof. Kellock that the question whether land revenue was rent or tax was not an important one, what mattered was whether the State had been a good landlord or not. Prof. Singh held that the land revenue was a tax on agricultural incomes and not a rent ; and that the theory of State landlordism was an erroneous one. If it had not been for the injurious practical effects, it would not have mattered whether it was called rent or tax, but under the circumstances, as pointed out in the Paper, it is necessary to clear the misconception. Prof. Singh further held that the Government, if it could be regarded as landlord, had been a very bad one In conclusion, he pointed out that land revenue should be regulated on the same principles as the income tax."

THOUGHTS ON INDIAN FINANCE.

By

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The termination of the Great War and the introduction of the Montagu-Chelmsford Reform, have both in their own way left some mark on the Finances of India. The War in its cumulative effects has succeeded in raising all around us a desire for more funds. The Military budget, which in its untrimmed condition, used to stand somewhere about thirty crores in the years immediately before the war, now, they say, is impossible to bring down below sixty crores, and that too after all the cuts applied by the Inchcape axe. The great inflation of currencies in Europe, and to a certain extent in India also, raised the level of prices, and thus on the one hand reduced the value of money received in taxation by the Government, and on the other led the various Services under the Crown to ask for more on the basis of higher prices, both leading to a strong demand for more taxation. The Montagu-Chelmsford Reforms, by separating the Provincial finances from the Central Finance of the Government of India, succeeded in bringing about a further reduction in the resources of the Indian Government. To make good this deficit they introduced the system of Provincial Contributions, and that in its turn has brought about stringency in the various Provinces, and that at a time when the Reforms have placed the Development Departments under Ministers responsible to the popular Legislatures. Whatever may be the opinion of political leaders, to me it seems that much of the unpopularity of the Reforms may be attributed to the lack of funds at the disposal of the Ministers, who, with all the good intentions, could do very little to improve the condition of the people. If Dyarchy has failed, much of its failure is due to this initial mistake. To me, therefore, the Problem of Indian Finance presents a two-fold aspect: First, how to secure increased funds for the Central Government to meet the expenditure on subjects pre-eminently Central, such as the Army, the Navy, the Air Force, Posts and Telegraphs etc. The same is true in greater measure of the Provinces, where not only more funds are needed for the present, but also from the nature of the subjects assigned to them, they would continuously need more and more. Secondly, how to bring about a division of sources of income and expenditure between the Central and the Provincial Governments, so that each may have its legitimate sphere of influence, and yet be perfectly independent of the other. The division, as it is at present, puts practically all the services such as Education, Sanitation and Industrial Development that need expansion and further development, and on which as the country becomes more and more organised, the chances are that more and more expenditure will be needed, under the Provinces ; while it assigns almost all the sources of income which have been yielding progressive income, such as Customs, and income from Railways, Posts and Telegraphs to the Central Government. And these are preeminently the sources from which income is likely to increase with every increase of material civilization in this country. The only source of income, under the existing arrangements, which is progressive and expandible, and from which Provinces get a share, is the Income-tax But it is almost an insignificant source as the Central Government has only permitted the Provincial Governments to retain a share in the growth of the income-tax, when this growth is due solely to an increase in the amount of income assessed, and is not due to any increase in the rate of the tax. This is arranged by giving to the Provinces three pies on each rupee of income assessed minus whatever this amounted to in the years 1920—21, less also one-fourth of the costs of collection. Even as it is the arrangement is but a temporary one

We may begin now with the second problem. At present the chief sources of income of the Central Government are : (1) Customs, (2) Income-tax, (3) Salt-Revenue, (4) Opium, (5) Profits of Railawys, and (6) Income from Posts and Telegraphs. Opium and salt excepted, all other heads of Revenue show a fairly sustained tendency to increase.(1) As a matter of fact revenue from salt is such a valuable, and dependable asset of the Imperial Government that a slight increase in it succeeds in bringing a large income to the Central Exchequer. In it the Government of India have a source of income wonderfully suited to meet emergency expenditure. While in sources of income such as Income-tax, the Customs, and Railways they have sources that have been expansive, and are expandible True, if India adopts a rigid policy of *Effective Protection* the income from Customs is likely to decrease after some time and not increase as some enthusiastic writers seem to suggest, i.e., when the policy of Protection will have made itself felt, and succeeds in developing home industries. But when income from Customs begins to fall, the chances are that the taxable capacity of the classes that contribute to the Income-tax will have increased, and the receipts from Railways, and Posts and Telegraphs are sure to increase also and thus make amends for any decline under Customs. From this brief study it should be clear that the Government of India have sources of income which have in them all the necessary attributes to meet all possible calls on them, under their various responsibilites.

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(1) Vide Table A.

I wish we could say the same of the allocation of sources of income and of expenditure in the case of the Provinces. The chief sources of revenue of the Provinces at present, are (1) Land Revenue, which at least in Bengal, Bihar and Orissa, and part of the United Provinces of Agra and Oudh is rigidly fixed, and in others is capable of increasing only after long periods of thirty to forty years. It is true that income from this source, as evident from the figures under this head (1), is secure and substantial. It is also expansive, and chances are that as progress in agriculture proceeds, income from this source will also increase. But as yet nothing serious has been done to make agriculture progressive, and we do not see any signs of rapid development in the near future. On the other hand, all students of rural economy will agree with me that it needs large initial funds to put it on a progressive basis. As it is, it may be looked upon as a source of progressive expenditure rather than of expansive income. And even when it become expansive in character, from its very nature, it will never be expandible at short notice. (2) Excise : Income from this source has been progressive, but if the popular Ministers are to keep the confidence of the public, and if they seriously set out to discouraging consumption of drugs, then at least that part of this source which is derived from the licensing of liquor shops is bound to fall much below its present level, if not to disappear completely, in course of

(1) Vide Table B.

time. But the income from that part which is levied on home production of things, like cotton cloth, and other commodities surely gives to the Provinces an item that has in it the merit of expansiveness as well as expandibility as the Provinces progress towards greater and greater efficiency in production. But as it is, there is not much chance of its being utilised for the increasing needs of the immediate future of such development services as wider facilities for Education, Sanitation, Road-building and the like. (3) Stamps, both Judicial and General Here again are sources of income with the Provinces which have been somewhat progressive in the past. But certainly that part of this income which is derived from Judicial stamps, though under the existing conditions of enormous litigation between the tenants and the zamindars on one hand and between co-sharers and their creditors on the other, is substantial, is not likely to remain so, (at least efforts should be made to decrease it) when changes in tenancy laws, as well as the pressure of public opinion will have improved the relations between the landed interests, and when further development of Co-operative Credit will have reduced the indebtedness of the landed classes to the age-old Mahajan of the village. This does not mean that the income from this source, taken as a whole, is likely to diminish. If there is a decrease in the income from Judicial stamps it is not likely to take place in the near future, and by that time the working of the very forces that will tend to bring about a diminution in this, a change for the better is bound to come in that part of it which is yielded by the general stamps. If people of India become progressive enough to diminish litigation, and to reduce their debts then they are sure to take to industrial development, and to greater share in commerce and trade ; and both these would bring about an appreciable increase in the use of General Stamps. (4) Irrigation : This is a source of income very much analogous to Railways, with the Imperial Government. Income under this head has been expansive in the past ; but it has in it two inherent defects. First. you cannot raise or lower the water rate with the same ease as the railway rates, and then the increased rate can only be operative after a certain definite time, and does not yield an immediate and continuous large income as an increase in the railway rates is sure to do. It, therefore, lacks the very desirable attribute of expandibility at a short notice to meet an immediate call on the Provincial finances. (5) Feeder Railways : Certainly income from this would have gone some way to relieve the defects in number 4, but this source of income is as yet absent in most of the Provinces. And so long as Feeder Railways, running within Provincial boundaries, are absent, this source may be looked upon as a hopeful sign of the future but not a tangible source of income for the needs of the near future.

From this discussion it should be clear that though in the Provinces we have one or two sources like Excise, General Stamps and Irrigation, which have been yielding a progressive income in the past, and which hold a promise of larger income in the future, their contribution to the total Provincial revenues is by no means considerable ; and land revenue may be looked upon as the mainstay of Provincial resources, and it is certainly not elastic. The want of elasticity, or what I have called expandability, in the items of Provincial revenue is what comes out most prominently after the brief discussion carried on above.

Academically speaking, want of elasticity in the Provincial systems of revenue is a serious draw-back, and may suggest the need of giving serious thought to the re-allocation of heads of revenue, as between the Central and Provincial Governments. But a little discussion of the nature of the functions of the two Governments would show that the problem is by no means so urgent as that. If there is a State, and practically all our Native States, and the Provincial administrations are in this catagory, that is seldom called upon to meet unforeseen expenditure on a large scale, then where is the need for such a State to have an expandible source of income like the Salt tax, or the Custom duties, or the Income-tax within its schedule of the sources of income ? If there is a State which has to deal largely with services that are stable in character and that only need slow though steady expansion, then such a State should have only such sources of income as are likely to yield a slow but steadily increasing income, of course sufficient to meet the quantitative calls on them. Certainly, the calls on the purse of the Provincial exchequer are of this type. They are substantial, but they are not sudden. True, to start with, they need large funds for their schemes of development in the Nation-Building Departments, but no serious student of finance has so far come forward to suggest that schemes of development that need investment of large funds in them, should be financed out of the current income of a nation. The proper method of financing such schemes is by means of loans, and the interest plus the redemption charges only on these long-term loans should be paid out of the current revenue. Under the Reforms the Provinces have been given this valuable right of raising loans on the security of their revenue and some of them have made use of it, whether for productive or unproductive purposes is a different matter.

On the whole, then, we can not say much against the distribution of sources of income as between the Central and the Provincial Governments, especially if we look at it in relation to the nature of the functions of the two Governments. Even when examined in the light of general principles which such authorities as Plehn or Bastable have laid down in this connection, the present allocation would justify itself. The same, however, can not be said of the existing system of contributions from the Provinces to the Central Govern ment to cover up their deficit, temporary or permanent, recurring or non-recurring. The Central Government have got the Income-tax, and the Salt Tax; both these have ultimately to be paid by the people in the Provinces, and both these are such as are capable of yielding larger income with an increase in the rate of assessment. If there is a deficit, why should the Central Government approach the Provinces for contributions, and thus cripple their resources and interfere with their even tide of progress in the pre-arranged schemes ; why should they not increase the rate of such taxes as mentioned above, and thus secure the necessary funds ? Ultimately the funds come from the people of the different Provinces whether they are taken by the Provincial authorities or by the Central authority ; but if the Central authority does it directly then the chances are that the incidence of the new levy would be more even than it is likely to be under the existing system of contributions. A direct tax is more likely to make different Provinces pay according to the ability of the people of individual Provinces than an indirect contribution from the Provinces.

We are now in a position to take up problem number 1. How can we secure larger funds both for the Central and the Provincial

Administrations? There are two possible ways in which this problem may be solved; either (*i*) the rate of the existing taxes may be increased or (*ii*) some new taxes imposed. There is a third, which if rightly carried into effect may bring about the same result, as an increase in the rate of existing taxes or the introduction of some new taxes, and yet eliminate the disadvantages of either, *i. e.*, the introduction of economy in the existing items of expenditure. To begin with, the last should be the aim of all Governments, and I note with pleasure that almost all the administration in India have tried, I am not prepared to say their level-best,—to make use of this method of securing largèr funds. Whether there are yet opportunities of making further reductions in the expenses of the Central Government, and the Provincial Governments, is a question that can only be answered by people in close touch with the internal working of these Governments and their administrative services; but from what little I know of what has already been achieved there does not seem to be much further scope in this direction. And even if we could bring about further economies in existing items of expenditure the relief thus afforded is not likely to last for long, as in an undeveloped country like India, and fairly on the road to progress, every new day is sure to bring fresh items of expenditure. This is a point which we in India must clearly recognise, and be prepared to face in all its bearings. We should however make every effort to see that every pie that is taken from the taxpayer is well spent, and is not utilised for unnecessary purposes. To me therefore the curtailment of expenditure does not offer itself as a permanent solution of the stringency of funds in the various Governments.

However, when I make the above statement, I do not mean by any stretch of imagination to imply that efforts should be relaxed in this direction or this fruitful source of income should not be utilised. What I wish to press for recognition is that under the existing circumstances we should not expect to get substantial and more or less lasting relief from this source. If India is to advance, as she must, need for further taxation is inevitable. And the problem is whether this further taxation should take the form of new taxes tapping so far untouched sources of income, or should take the form of higher rates of the existing taxes. On the face of it there is not much difficulty in choosing between the two. I for one would always prefer a tax that is likely to fall on incomes so far untaxed, as it is sure to cause less opposition. The people who are already paying the existing taxes, are likely to support gladly a scheme of taxation that attempts to make those people pay who had escaped so far from contributing to the needs of the State, rather than a scheme that is likely to add to their existing burden. The only opposition that is likely to be offered to new taxes may be expected from the classes that are likely to be touched by them. But if the classes should legitimately come within the sphere of taxation, and if they have so far escaped, there is no reason why they should continue to be free when the country needs all the funds that we can command for her orderly development.

This brings me directly to the question—are there any new sources that could be tapped by the Central and the Provincial Governments—sources that would continue to maintain the strict separation of finances contemplated by the Montagu-Chelmsford Reforms. Let us take the Central Government first. We find a suggestion in the Meston Report on Financial Relations, that the Central Government may tax landed incomes beyond a certain figure. I do not object to the taxation of landed incomes as such, but I would rather see them taxed by the Provincial Governments. Land Revenue at present is entirely a Provincial subject, and any scheme of supertaxation by the Central Government, would be tantamount to the introduction of that sharing system which is definitely against the letter and spirit of the Reforms. This source of income was also recommended by Professor C. D. Thompson, of the Allahabad University, in a Paper read before the Conference of Economists, held at Allahabad in 1920, but he too contemplates it as a source of income for the Provinces, and to me that seems to be its logical place. If not this, then what other source could be suggested to the Central Government ? I plead inability to recommend any new source that so far has not been utilised either by the Provinces or by the Central Government. But I am one with Mr. Shahani (1) in recommending that the Central Government should take up from the Provinces that part of the income under the head Excise, which is derived from the taxation of the production of such home-made goods, as alcoholic drinks, and other narcotic drugs, making of cigarettes, tea, salt, cotton goods, jute goods and the like. This would secure uniformity of excise taxation which may not exist if each Province adopts a different rate. It is essential that we should have uniformity of rate in all the Provinces, for this reason alone that when these very commodities are imported from abroad they are taxed at a uniform rate under the Customs to whichever province they may ultimately go ; and this in the words of Mr. Shahani to " preserve healthful and equitably distributed industries" by providing as far as possible "the same conditions of manufacture in all parts of the country." And this can only be achieved if the Central Government were to assume exclusive control over the administration of this form of excise. To distinguish this from the tax that would continue to be levied by the Provinces on the sale of drugs etc. we may call this tax on production "excise", and the latter a "Licensing Fee" or something else to the same effect. The same line of argument leads me to recommend that General Stamps should become, as originally suggested by the Montague-Chelmsford Scheme, a source of Imperial Revenue.

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(1) Vide his paper on Indian Finance and Reform Scheme, read before the Conference of 1920.

True the transfer of these two from the Province would cause a further stringency there, but part of it would be met by the Central Government refusing to take the Provincial Contributions. On the average during the five years ending 1919-1920, the Provinces have been receiving £10,456,892 and £2,307,598 respectively from Excise and the General Stamps. If these two go to the Central Government and if the Central Government give up the Provincial contributions which amount to something like 6 million pounds then there will be a deficit of 7 million pounds in the Provinces. However we should note here that the deficit will not be so great as that, as the Provinces will continue to get that part of the Excise Revenue which is now received from the Licensing of sale of opium, liquor and bhang etc. What part this forms of the total excise revenue, is difficult to give in definite figures, as no separate figures are available. But we may take it to form at least 1/3 of the total, *i.e.*, the real deficit will be of something like between 4 and 5 million pounds. But the Central Government will have secured an independent and balanced budget, so far as their present needs are concerned And if at any time their needs increase, then they have almost all sources of income that are elastic, and therefore capable of increasing to suit the need of the moment.

If the above arrangement is adopted then the Provinces on the whole will have a deficit. How should we meet it? In Schedule 1 to the Scheduled Taxes Rules we find eight items which could be utilised by the Provinces without the previous sanction of the Governor-General-in Council. These are (1) A tax on land put to uses other than agricultural. (2) A tax on succession or on acquisition by supervisorship in a joint-family. (3) A tax on any form of betting or gambling permitted by law. (4) A tax on advertisements. (5) A tax on amusements. (6) A tax on any specified luxury. (7) A Registration Fee. And (8) a stamp-duty other than duties of which the amount is fixed by Indian Legislation. Numbers 1,3, 5,7 and 8 are already being utilised by some of the Provinces, while there is not much scope for no. 4 in this country at this stage of industrial development. The Provinces could, and with advantage to the exchequer utilise no. 2, but with certain reservations. In the case of larger estates, where each new successor is to get a share of the total value of say rupees fifteen or twenty thousand, the payment of succession duty of, say, 10 per cent. is not likely to be irksome, and may not lead to indebtedness of the future owner; but in the case of those who succeed to small estates, and whose share is to be of less value than, say, rupees ten thousand, a succession duty is likely to cause serious disadvantages. Then again in any scheme of succession duties, the debts contracted by the previous owner should also be taken into consideration, and deductions made while deciding whether a certain estate is liable to be assessed. But with the exception of Permanently Settled Provinces, and Oudh in the United Provinces, this source of income is not likely to bring in appreciable relief to the Provinces. And we have to look for other sources of income for the Provinces.

Here the first to suggest itself is the scheme of super-taxation on all landed incomes beyond say rupees five thousand per year, at a progressive rate. In the permanently settled parts of India the desirability and legitimacy of adopting this new taxation is beyond doubt, and it is here that this tax is likely to yield considerable in come. This does not mean that in other Provinces such as the Punjab, the Central Provinces and the Agra Provinces, the tax is not likely to be fruitful, but only this that income from it is not likely to be as important as in the Permanently Settled parts. Speaking for myself, I should adopt a higher rate of taxation of landed incomes, and a lower un-taxable minimum in the Permanently Settled parts, and that to make amends for the blunder of 1793.

We see, therefore, that if the Provinces are given back the money they now pay in Provincial Contributions, and if they introduce these two new taxes, then their present deficits caused by the removal of taxes on home production (excise) and the General Stamps to the Central Government would disappear. And perhaps the only problem that would then remain for the Provinces to solve would be to provide funds for their schemes of development. To a certain extent this may be done by selling by auction large areas of Nazul lands to the public. This would at once bring a considerable quantity of cash to the Provincial exchequer, and diminish the expenditure that is now incurred on the maintenance of the Nazul staff.

But all these arrangements are not likely to solve the Provincial problem of providing a continuously expansive income. To me it seems that it can only be solved if the Provinces adopt a bold programme of development in the rural areas, and thus increase the production from land, and bring about an increase in the taxable capacity of the people. We are now in a vicious circle: the production of the agricultural industry is low, because our methods of production are backward, because the agricultural classes are ignorant and poor and can not afford to make use of improved implements and better methods of farming. They are ignorant and poor because the industry does not yield enough. This vicious circle has to be broken, and to me its weakest link seems to be the ignorance and the lack of funds of the cultivator. The State in the beginning should provide funds for removing these, and that can only be done not by raising taxation, but by free-borrowing on a large scale, and then the application of funds so secured towards the development of Co-operative Societies, drainage, and irrigation schemes, experimental and demonstration farms, education of the people in rural areas, both the land-lords and the zemindars, and the giving of loans at easy rates to the agricultural classes for carrying out development schemes. What is wanted is a well thought out programme of economic reconstruction, with its stages clearly marked out, the part to be played by the Government, the landlord, the cultivator, and the educated classes in its accomplishment pre-defined, and then the funds necessary to enable each class to function and do its work properly unhesitatingly provided.

TABLE (A).

(IMPERIAL AT PRESENT)
(IN THOUSANDS OF POUNDS)

Year.	Opium	Salt	Custom	Income Tax	Railways	Posts & Telegraph.
1898–99	3,817	6,017	3,201	1,281	13,076	1,993
1899–00	4,402	5 850	3,134	1,300	14,650	2,136
1900–01	5,102	5,967	3,372	1,322	16,941	2,248
1901–02	4,853	5,939	3,833	1,369	19,258	2,287
1902–03	4,498	6,184	3,978	1,410	19,116	2,304
1903–04	5,736	5,250	3,966	1,215	20,549	2,362
1904–05	6,022	5,355	4,362	1,270	22,869	2,472
1905–06	5,469	4,376	4,348	1,321	24,594	2,561
1906–07	5,661	4,363	4,352	1,424	26,276	2,704
1907–08	5,245	3,339	5,004	1,504	27,625	2,831
1908–09	5,885	3,276	4,832	1,553	26,871	2,804
1909-10	5,535	3,320	4,965	1,559	28,982	2,830
1910–11	7,522	3,176	6,619	1,593	30,669	2,994
1911–12	5,961	3,391	6,469	1,653	33,637	3,222
1912-13	5,125	3,334	7,197	1,742	36,764	3,437
1913–14	1,625	3,445	7,558	1,950	37,639	3,599
1914–15	1,572	3,911	6,347	2,037	36,176	3,597
1915–16	1,914	3,648	5,874	2,090	38,268	3,787
1916–17	3,160	4,826	8,559	3,773	42,063	4,175
1917–18	3,079	5,499	11,037	6,308	46,042	4,617
1918–19	3,289	4,278	12,121	7,758	50,944	5,343
1919–20	3,037	3,832	14,989	15,472	52,964	6,137

TABLE (B).

(PROVINCIAL AT PRESENT.)

(IN THOUSANDS OF POUNDS.)

Year.	Land Revenue.	Forest.	Excise.	Prov. Rates.	Registration.	Irrigation.	Stamps Judicial.	Non-judicial.
1898-99	18,306	1,240	3,829	2,615	294	2,305	2,228	967
1899 00	17,205	1,235	3,860	2.499	288	2,397	2,270	992
1900-01	17,503	1,298	3,907	2,563	313	2,553	2,282	1,058
1901-02	18,288	1,157	4,077	2,741	313	2,531	2,290	1,054
1902-03	18,437	1,298	4,427	2,747	314	2,765	2,372	1,070
1903-04	19,234	1,481	4,980	2 825	327	2,907	2,453	1,131
1904-05	18,954	1,602	5,353	2,824	339	3,067	2,548	1,187
1905-06	18,862	1,780	5,688	2,798	362	3,007	2,642	1,259
1906-07	19,832	1,769	5,898	2,281	380	3,538	2,680	1,315
1907-08	18,756	1,733	6,219	2,333	415	3,486	2,921	1,547
1908-09	19,759	1,701	6,390	534	431	3,558	3,028	1,537
1909-10	21,332	1,735	6,538	539	430	3,660	3,231	1,525
1910-11	20,878	1,830	7,030	554	426	3,695	3,425	1,552
1911-12	20,765	1,952	7,610	549	446	3,980	3,352	1,686
1912-13	21,282	2,153	8,278	552	482	4,411	3,487	1,852
1913-14	21,392	2,230	8,894	180	519	4 713	3,634	1,979
1914 15	21,222	1,981	8,857	39	485	4,681	3,628	1,712
1915-16	22,031	2,074	8,632	42	519	4,779	3,894	1,854
1916-17	22,041	2,471	9,216	31	541	5,156	4,073	2,047
1917-18	21,607	2,731	10,162	29	528	5,064	4,019	2,032
1918 19	21,090	3,121	11,558	28	573	5,347	4,180	2,301
1919 20	22,610	3,578	12,840	36	724	5,853	4,646	5,304

CENTRAL AND PROVINCIAL FINANCIAL RELATIONS.

BY

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I propose in this Paper to deal only with one aspect, but in my opinion, the most important aspect, of the financial relations between the Central and Provincial Governments in India *viz.*, the allocation of revenue resources between these Governments before and since the Reforms, and, I hope, to show how vitally important it is that the existing scheme of allocation should be reconsidered in the interests of the economic welfare of the millions of people inhabiting this country.

Before the Reforms of 1919, the finances of India were regulated by the Government of India Acts of 1853 and 1858, the fundamental principle underlying both the Acts being to treat the revenues of India as one and apply them to the purposes of the country as a whole. The East India Company as a Commercial body naturally kept the Central Government in full control of all the revenues of the country, and on the transfer of India from the Company to the Crown, though many other changes were made, this important principle was kept intact in order that the Secretary of State for India might be able to control the whole administrative machinery of the country through the Central Government Provincial Governments had in other respects extensive powers, but they could incur no actual expenditure without the formal orders of the Government of India. This system was naturally felt to be very irksome by the Provincial Governments and a change for the better, to a slight extent, was made under Lord Mayo's Government, chiefly through the efforts of Sir Richard Strachey. Each local Government was now given a fixed grant for the upkeep of definite Services, such as Police, Jails, Public Works, Education and Medical Services. Within certain limits, the allocation of the grant between these Services could be made by the local Government as it liked, and the latter could also raise additional money by local taxes. All the residuary revenues went to the Central Government. A further advance in the same direction was made in Lord Lytton's time when in place of the fixed grants, certain specified heads of revenue were made over in whole or in part to the Provincial Governments out of which they were to meet the expenditure upon the ordinary Provincial Services. These heads were—Forests, Excise, License-tax (now Income-tax), Stamps, Registration and Provincial rates. As the revenue from these heads was not ordinary by sufficient for Provincial requirements, it was supplemented by a percentage of the land revenue. Settlements of the portions and percentages began to be made every five years from 1882. These quinquennial controversies could not, of course, lead to much smoothness of relations between the Central and Provincial Governments. So in 1904, under Lord Curzon's Government, the settlements were made quasi-permanent. Finally, Lord Harding's Government in 1912 made the settlements permanent, increased the Provincial share of growing revenues and curtailed their intervention in the preparation of Provincial budgets. In spite of all these improvements, however, the fundamental fact remained that the Provincial settlements were always based, not on Provincial revenues, but on what the Central Government considered to be the Provincial needs. Central control over Provincial expenditure was inevitable under these circumstances. As regards revenue, too, so long as the Government of India took a share in the proceeds of an item, it naturally, interfered in the details of administration. In the case of land revenue, for instance, it closely supervised the revenue settlements; likewise in the case of irrigation and so on. Hence it was that in their Report on Indian Constitutional Reforms, Mr. Montagu and Lord Chelmsford stated that if responsibility to the Legislatures was to be introduced in the Provincial Governments, "clearly the Provinces must not be dependent on" the Indian Government for the means of Provincial development. The authors of the Report, therefore, aimed at entirely separating the resources of the Central and Provincial Governments. They found the heads of revenue classified into (1) Indian, (2) Provincial (3) Divided. Customs, Salt, Opium, Railways, Posts and Telegraphs belonged to the first category. Provincial rates and receipts from Registration, Law and Justice, Public Works and Education belonged to the second category. Land revenue, Income-tax, Stamps, Excise and Irrigation were "divided heads" in all or some of the Provinces. For instance, Excise was entirely a Provincial head in

Bombay, Bengal and Assam, but not elsewhere. Land revenue was equally divided between the Central and Provincial Governments except that Burma got rather more than one half and the United Provinces rather less. The problem was how to allocate the "divided heads" so as to bring about complete separation of resources, the wholly Indian and Provincial heads being continued as before. The solution proposed in the Montagu-Chelmsford report was as follows:—Land revenue, excise and irrigation were to be made Provincial heads. Of course, along with land revenue, the Provinces were to take up the very heavy liability for famine relief and protective irrigation works. The Income-tax was to become a wholly Indian head. As regards stamps, Judicial stamps were to become a Provincial head whereas General and commercial stamps were to be a Central head.

As regards the expenditure to be met by the Central and Provincial Governments respectively, the Report has very little to say. It enumerates the things which the Cental Government must do by the necessities of the case *viz.*, (1) defence of the whole county; (2) administration of the Commercial Departments, such as the Railways, Posts and Telegraphs; (3) administration of strategic areas like the North-West Frontier Province; (4) Foreign relations and relations with Indian States; (5) service of the Indian debt; (6) Audit and Accounting; (7) payment of Home charges. By inference, the Provincial Governments are to look to everything else *viz.*, (1) Civil Administration; (2) Police; (3) Jails; (4) Justice; (5) Public Works; (6) Education; (7) Sanitation and Medical relief; (8) Agriculture and Industries.

The authors of the Report found that when all sources of revenue had been separated and distributed as they proposed—and the heads of expenditure allocated in the obvious way—the Central budget showed a large deficit, which they calculated at 1363 lakhs, whereas the Provincial budgets all put together showed a total surplus of Rs. 1564 lakhs. So they proposed that the Provinces should contribute to the Central Government enough to meet the deficit, and they would still have Rs. 201 lakhs more between them as a result of the re-arrangement of the finances. The total deficit worked out at 87 per cent of the total surplus, so they proposed each Porvince should contribute 87 per cent. of its own surplus. They showed in a Table the share of contribution of each of the nine Provinces and the surplus which each of them would still start within the Reformed era. Here is the table :—

Province	Gross Provincial Revenue.	Gross Provincial Expenditure.	Gross Provincial Surplus	Contribution (87 per cent. of col. 4).	Nett Povincial Surplus.
1	2	3	4	5	6
		(LAKHS	OF	RUPEES.)	
Madras	13,31	8,40	4,91	4,28	63
Bombay	10,01	9,00	1,01	88	13
Bengal	7,54	6,75	70	69	10
United Provinces	11,22	7,47	3,75	3,27	48
Punjab	8,64	6,14	2,50	2,18	32
Burma	7,69	6,08	1,61	1 40	21
Bihar and Orissa	4,04	3,59	45	39	6
Central Provinces	4,12	3,71	41	36	5
Assam	1,71	1,50	21	18	3
Total	68,28	52,44	15,64	13,63	2,01

The table at once shows the great disproportion between the contributions to be made by the various Provinces. Madras is to pay Rs. 4,28 lakhs and the United Provinces Rs. 3,27 lakhs, whereas Bombay escapes with a payment of Rs. 88 laks and Bengal with that of Rs. 69 lakhs. The authors of the Report were not unaware of this, but they pointed out that it was not their proposals which created this inequality for the first time: it had always been there, but what had hitherto been concealed under the system of divided heads had now been laid bare, that was all. They admitted that their scheme failed to remove the inequality, but they proposed that the next Statutory Commission, which would revise the Constitution, should re-investigate this question of Provincial Contributions to the Government of India.

A great deal of feeling was, however, created in certain Provinces when the Report laid bare what had hitherto not been noticed by the parties concerned. So the Government of India pressed for an earlier consideration of this question than the Statutory Commission which was only to sit after ten years. The Joint Select Committee of Parliament on the Reforms Bill accepted this view. So the Secretary of State appointed a Financial Relations Committee, with Lord Meston as Chairman and Messers. Charles Roberts and E. Hilton Young as Members, to recommend what contribution should be made by each of the Provinces for the year 1221-22, and how the same might thereafter be modified with a view to equitable distribution until there ceased to be any deficit in the Central Budget.

The first important proposal of the Meston Committee was that all receipts from Stamps, whether General or Judicial, should go to the Provinces, and that the head should not be split up as proposed in the Mantagu-Chelmsford Report, Judicial Stamps alone being made a Provincial head and General Stamps going to the Central Government. So the Meston proposal made an end of the last vestige of "divided head" and carried the principle of separation of Central and Provincial resources to its logical conclusion.

Then they re-estimated the deficit in the Central budget for the year 1921-22 and they showed how it would amount, according to their calculations and re-adjustments, to only Rs. 9,83 lakhs. Then they gave reasons to show that the best principle on which to levy contributions from the Provinces, in order to meet this deficit would be, not a proportion of the gross surplus of each Province as the Montagu-Chelmsford Report had suggested, but a proportion of the additional spending power which was going to accrue to the Provinces because of the new distribution of resources. This additional spending power, the Committee pointed out, was in the nature of an unexpected benefit to the Provincial Governments, so if a portion of it was withheld—a portion proportionate to the additional spending power accruing in each case—the Provinces could not rightly grumble about the matter. Going upon this principle the Committee recommended the following as the initial contribution of each Province:—

Province	Increased spending power under new distribution of revenues.	Contributions as recommended by the Committee.	Increased spending power left after Contributions are paid.
	(In lakhs	of rupees.)	
Madras	5,76	3,48	2,28
Bombay	93	56	37
Bengal	1,04	63	41
United Provinces	3,97	2,40	1,57
Punjab	2,89	1,75	1,14
Burma	2,46	64	1,82
Bihar and Orissa	51	*nil.*	51
Central Provinces	52	22	30
Assam	42	15	27
TOTAL	18,50	9,83	8,67

The Committee admitted the inequality of these initial contributions though its proposals left each Province with an appreciably greater amount of spending power than the Montagu-Chelmsford proposals would have done. They then proceeded to consider how this inequality could be progressively diminished and an equitable standard reached. They, of course, made it clear that the sooner the deficit in the Central Budget disappeared and the need for contributions from the Provinces ceased, the better for all. Their proposals were to be only for the intervening period which they hoped would be short. In arriving at an equitable ratio of contributions, the Committee seem to have taken an extra-ordinary amount of trouble. They tell us in their Report on p. 11, "In arriving at this ratio we have taken into consideration the indirect contributions of the Provinces to the purse of the Government of India, and in particular the incidence of Custom duties and of Income-tax. We have inquired into the relative taxable capacities of the Provinces, in the light of their agricultural and industrial wealth and of all other relevant incidents of their economic positions, including particularly their liability to famine. It should be observed that we have considered their taxable capacities not only as they are at the present time, or as they will be in the immediate future, but from the point of view also of the capacity of each Province for expansion and development agriculturally, and industrially, and in respect of imperfectly developed assets such as minerals and forests. We have also given consideration to the elasticity of the existing heads of revenue which will be secured to each Province, and to the availability of its wealth for taxation. After estimating, to the best of our ability, the weight which should be given to each of these circumstances, we recommend the following fixed ratio as representing an equitable basis for the relative contributions of the Provinces to the deficit. That a Committee of three gentlemen, which began its enquiry on the 5th February 1920 and signed its Report on 31st March 1920, should have been able during one month and twenty-four days (it was a leap year) to do all the work modestly outlined above is, I believe, an unparalleled feat of human achievement, and yet Sir Basil Blackett wonders how his Taxation Committee could tackle in a year or two the problem of the taxable capacity of this country !

Here are the percentages of the initial contributions and the equitable contributions which latter the Committee propose should be reached by stages in the course of seven years. Percentages have been given in order that a diminution of the Central deficit should automatically lead to a corresponding diminution in the actual amounts of contributions paid by the Provinces in any year :—

Per cent. contributions to deficit.

Province.	1st. year.	7th year.
Madras	35½	17
Bombay	5½	13
Bengal	6½	19
United Provinces	24½	18
Punjab	18	9
Burma	6½	6½
Bihar and Orissa	*nil*	17
Central Provinces	2	5
Assam	1½	2½
	1000%	100%

For three years, from 1921 to 1923, the Reforms have been worked on the new financial basis proposed in the Montagu-Chelmsford

Report as modified by the Meston Committee's Report, and they have been worked by a party which believed in honestly giving them a trial. Change in this respect only came in 1924 and we shall omit the consideration of that year. And how did the new financial arrangement work during the first three years of the Reforms ? Is it not a fact that in spite of the additional spending power with which the authors of the Montagu Chelmsford Report and the Meston Report thought they had blessed the Provincial Governments at the beginning of the new era, evey one of those Governments found it extremely difficult even to carry on the administration in the same old pre-Reform fashion ? Instead of new programmes of education, sanitation, rural public works, agriculture, rural and urban industrial development etc., were not many of the pre-Reform activities in these Departments actually stopped or curtailed in most of the Provinces in the new Reform era ? And yet, in order to do this smaller amount of nation-building work, did not every Province have to resort to additional taxation ? Could each Province, with all efforts it made, raise more than a crore or two of rupees of additional taxation ? After raising that amount once, did not every Province feel at its wit's end how to raise more money if it wanted to launch a new programme of nation building activity ? On the other hand, is it not a fact that the Central Government could raise thirty crores at a stroke in one year and another ten in the next, though, of course, these forty crores of rupees of additional taxation by the Central Government did not bless the country with a new nation-building service, any more than the twenty crores or so of additional Provincial taxation did anything in that line ? All these additional crores went merely to keep things going as in the pre-Reform days, as a matter of fact not even that much was done as pointed out above. The financial troubles in the Provinces led to attention being concentrated on the Provincial contributions to the Central Government, especially in Madras, United Provinces, Punjab and Burma. A great crop of inter-provincial jealousies sprang up on this account, and the agricultural Provinces were ranged against the comparatively advanced industrial ones. Bombay alone, from the very first, has tried to direct the attention of the country to the grievous flaw in the new scheme of distribution of resources adopted in the Montagu-Chelmsford Report *viz.*, that the Central Government was given all the expansive heads of revenue, with the exception of Excise, whereas the Provincial Governments were saddled with all the heads of expenditure wherein the public demand for expansion was practically insatiable. No wonder that the reformed Provincial Governments had precious little of the new era to show to their subjects in spite of the additional taxation Let us closely examine the three Tables culled from the Statistics of British India, 1922. Table No. 1 shows the growth of the revenue for the whole of British India since 1877 down to 1920 by quinquennial averages. The remarkable growth of Customs, Excise and Income-tax is the most outstanding feature of that Table The growth during the war-period should particularly be noted. Land revenue and stamps show only a very moderate growth. Salt is not very encouraging, though at a pinch it could be made to yield more as experience has shown. Opium revenue was practically threatened with extinction when the Chinese market was closed in 1913, but other consumers seem to be keeping it up to no mean a height.

Table No. 3 ought to be taken next. It shows the results of the working of the Commercial Departments. As the name indicates, the least that ought to be expected of these Departments is that they should not land the State into a loss, but most of them did till nearly the end of the last century. But since then they have been a source of profit which has increased considerably from 1912 onwards.

Taking Table No. 1 and Table No. 3 into consideration, and adding to them the experience of the three Reform years, not the slightest doubt can be left in one's mind that the new allocation of resources left most of the cream in the hands of the Central Government. The one expansive source of revenue which was allotted to the Province was Excise *i.e.*, mainly liquor excise, and that is an item which public opinion is overwhelmingly in favour not of expanding but of contracting. The same could, of course, be said of the item of opium, on the Central side. Only Excise is a prop of Provincial revenue, whereas Opium is a comparatively unimportant item of Central revenue.

Now let us look at the growth of expenditure during the same period as depicted in Table No. 2. The expenditure is for the whole of British India. The item which monopolises attention is the Army. Education, Sanitation, Agriculture, Industries, in short all the nation-building Departments are compressed under the heading of "Civil Departments" in the Table. All these put together, and the Police added on to them, weigh less and have always weighed less in comparison with the Army. For thirty years before the War Indian public men have been protesting against the excessiveness of the Army expenditure and against the starvation of Education, Sanitation and Medical relief and the woeful neglect of Industries. The origin of the Reforms lay in these incessant protests. The Reforms were meant to give Indians the chance of doing what they had charged the pre-Reform Government with having failed to do. The things that the Indians wanted done on a much larger scale than had ever been attempted were to be done in the Provinces, and that meant money and more money and still more money at the command of the Provincial Governments. And yet, in the Montagu-Chelmsford Report, when the allocation and separation of resources come to be discussed, these urgent needs for ever increasing expenditure on the nation-building Departments in the Provinces are not even so much as mentioned. The expenditure of the Central Government of which the main portion is the extra-ordinarily swollen military expenditure, is quietly taken as a reasonable first charge on the revenues of India; all the expansive heads of revenue excepting Excise, are handed over to it to meet that expenditure and to meet its growth too; and on the top of it all the Provinces are saddled with contributions because the Central budget still cannot balance, whereas the Provinces are left to launch their programmes of Education, Sanitation, Medical relief and what not with invisible funds.

The whole basis of the allocation of resources under the Reform scheme has entirely ignored the new Provincial liabilities in the expectation of which the people asked for the Reforms and unless that basis is seriously re-considered, those expectations have small chance of fulfilment. It is not merely a question of the abolition of Provincial contributions. That abolition will undoubtedly help Madras, United Provinces, Punjab and Burma a great deal, but even so will not give them an expansive item of revenue, it will only help them to make up leeway and come up to the level of the advanced Provinces like Bombay. What is essential, in addition to the abolition of Provincial contributions, is the surrender of the income-tax by the Central to the Provincial Governments. That will give even the agricultural Provinces a great stimulus to the development of industries and trade within their areas, so that there will be an expansive source of revenue at the command of all the Provincial Governments to meet the growing expenditure in those Departments wherein public opinion keenly demands great and rapid strides.

All this sounds, I know, like asking for the moon. But I am speaking as an economist among economists and not as a practical politician which is not my role. The key to it all is a drastic cut in the military expenditure. It is for the politician to consider how that is to be brought about. My purpose in the present Paper as I said at the outset, is to show the vital need for a re-consideration of the allocation of resources between the Central and the Provincial Governments. I leave it to the reader to judge how far I have succeeded in doing that

ALLOCATION OF REVENUES BETWEEN THE CENTRAL AND THE PROVINCIAL GOVERNMENTS.

BY

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The problem of fiscal relations of the different public authorities has come to the front everywhere. This is due to two reasons. The growing public expenditure on account of the increasing complexity of social life and the extension of public activities makes the search for new sources of revenues an imperative necessity. The public authorities of all grades are hard pressed for money, and are naturally anxious to have wider taxing powers. The other reason for this development is the breakdown of the administration of many important and time-honoured fiscal expedients on account of the growing integration of economic life. The problem has assumed an acute form in India for reasons which it is not necessary to discuss at length. The Constitutional changes called for radical changes in the fiscal inter-relations of Central and Provincial Governments in order to realise the ideal of giving to the Provinces "largest measure of independence of the Government of India". But, unfortunately, the authors of the New Constitution had to reckon with the accumulated inequalities of the past which could not be redressed at once. They knew from experience that the tangle which they had to unravel was the result of an absence of a clear line of demarcation between the duties and the resources of the Central and the Provincial authorities; and it appeared natural to them that since the knot could not be untied, it should be cut and the resources of the Government of India completely differentiated from those of the Provincial Governments. The formula which embodied the new wisdom was that for administrative clean-cut financial clean-cut was necessary. Each authority was to have distinct sources of revenue, and no arrangement which had the remotest 'taint of the divided heads' could be allowed to continue under the new regime. The realisation of the project threw certain anomalies into bold relief which till then had been hidden from the eye by the intricate arrangements of the old order. It was unfortunate that what was implicit should thereby become explicit, and thus be exposed to the public eye, but it was contended that it was better to face the facts of the situation squarely, recognise that they were disagreeable, and work for the future with a firm conviction that the inequalities would be smoothed out in due course, and the specific of the 'clean-cut' prevent the recurrence of similar complications. It was assumed that for the success of the constitutional experiment it was necessary that the Provincial Governments should have a working surplus, and thereby be made capable of introducing measures of social and economic reform The later developments belied these expectations. Several important assumptions on which the new arrangements were based proved to be wide of the mark. The Provincial Governments, instead of having abundant resources for financing the schemes of social betterment, could not even balance their ordinary budgets. The Central Government found that equilibrium between revenue and expenditure, for the attainment of which it had incurred so much odium, could not be realised. The Provinces clamoured for relief from the contributions. The Central Government had nothing better to offer in return than a renewed assurance that their reduction would be the first charge on the betterment of Central revenues. The situation improved last year, and the prospect of a partial relief to the three Provinces was held out by the Finance Member, but the circumstances which are a matter of common knowledge made it impossible for him to carry out his intentions. It is not easy to give a correct description of the present situation. It would not be wrong, though not quite apt, to call it a state of suspended animation. It is necessary to analyse briefly the fundamental features of the present arrangements, and see why and in what directions they ought to be revised, if they are to work well in the future.

The basic principles of the existing arrangements are well known They have been clearly set forth in the Chapter VIII of the Joint Report. They, unlike the settlements which they have succeeded, are not based on the estimated needs of the Provinces, but aim at making them independent of the help and control of the Government of India The complete separation of resources was considered necessary to enable them to work out their own destiny. Income tax and tariffs were to be assigned to the Central Government. As regards the latter head of revenue there was and can be no difference of opinion. It ought to be controlled by the Central authority, otherwise the economic unity of the country, without which the political unity cannot be preserved, would be put in jeopardy. The arguments for making income-tax a Central head were put forward with great earnestness. The most important of them were the need of uniformity of rates and that of avoiding the difficulty of assessment and administration arising out of the incomes being derived in one Province and received in another. Land Revenue was to be assigned to the Provincial Governments on account of its intimate connection with the whole administration in rural areas. Excise, Judicial Stamps, Registration, Irrigation, and Forests were also to be made Provincial receipts, while Salt, Opium and Commercial Stamps were to go to the Central Government. The All India deficit, which would result from the adoption of this scheme was to be covered by requiring each Province to contribute 87% of the gross surplus to the Central Exchequer. The Government of India in their despatch of the 5th March 1919, while accepting the principle of covering Indian deficit by fixed charges on the Provincial revenues, and assessing it as an all-round ratio of the gross surplus, contended that an arrangement which disclosed the true position of the Provinces in the past would not, on that account, justify the continuance of the inequalities in the future. They, therefore, suggested that the initial scale of contributions should be treated as provisional, and steps be taken to fix a standard scale on some equitable basis. The Meston Committee which was appointed to fix a standard scale of contributions pointed out that though the initial contributions could not be made equitable on any acceptable basis, they should in a period of seven years be changed so as to correspond in some measure to the capacity to pay of each Province. It recommended that the commercial stamps should also be made a Provincial head, and uniformity of rates secured by making it subject to the Indian legislation. This change was considered necessary in order to leave to each Province a reasonable working surplus. The basis of the initial contributions was altered. Instead of gross surplus the basis of apportionment of the deficit was to be the additional spending power, which would be placed at the disposal of the Provinces under the new arrangements. But the contributions were not to be levied at a flat rate on account of the disparity in the financial strength of the different Provinces. The major provinces of Madras, United Provinces, Punjab, Bombay and Bengal were to surrender 60% of their additional resources, Central Provinces and Assam 40% on account of their small margin of surplus and the need for development, and Burma only 6% in view of its backward condition. Bihar and Orissa was recommended for complete exemption, as it was the poorest Province, and the imminent liabilities which it had to meet to provide the requirements of a self-contained Province would strain her resources to the utmost. The Joint Committee accepted these recommendations, but laid down that on no account should the initial contributions be raised, and standard proportion should be reached by affording relief to those Provinces, which were being called upon to pay more than their due share as soon as the condition of the Central finances made the reduction of the total contribution possible. These arrangements are an integral part of the present Constitution, and cannot be changed till the whole question of the revision of the latter becomes a practical issue of immediate importance The revision of the Meston Settlement has been urged by various parties. As things are, only the Provincial contributions are receiving public attention, and their early extinction is being demanded. But the problem is more difficult, and cannot be solved merely by the cessation of contributions. The whole scheme is the result of certain presumptions, the validity of which can be questioned from scientific standpoint. It is necessary to examine the position little carefully. There are three important reasons why the scheme is defective and cannot give us an enduring basis for the solution of the problem The first is that while admitting the existence of the inequalities, it makes no provision for their removal. Since 1870, when Lord Mayo introduced the fiirst measure of decentralisation, again and again the mistake of taking the existing scale of expenditure as normal has been committed. As Gokhale pointed out in his evidence before the Welby Commission, the settlement of 1870 crystallised the inequalities which had grown up on account of the distribution of resources having been effected in an arbitrary manner by the Government of India by making fixed assignments to the Provinces for meeting ther respective scales of expenditure. The quinquennial settlements introduced in 1882 accentuated the differences still further. The practice of resuming the unexpended balances, and revising the settlements on the basis of the Provincial expenditure at the end of the period put a premium on extravagence, and made it necessary for each Province to raise the apparent scale of expenditure. The Provinces which were most successful in displaying their needs received differential treatment. After the quasi-permanent settlement of 1904, which again left the inequalities unredressed, the distribution of 'doles' for specific purposes had the effect of making the favourable treatment of some Provinces more pronounced in certain cases. During the war some Provinces adhered to economy very strictly, while others increased their expenditure more freely. The result of these successive phases of the financial history of India has been the same. There is a wide divergence between the scales of expenditure set up in different Provinces. The existence of these differences is admitted, but their extent is not generally known. In Statement I the disparity is set forth in a tabular form. It was, to use the words of the Joint Report, masked by a system of divided heads in 1920. In Statement II the corresponding figures for the year 1922-23 (the year for which the actual figures of revenue and expenditure are available) are given. The comparison of the two statements will show that the Reforms have not made any appreciable difference in this respect. It is not necessary to add that this disparity is not in the best interest of the country. If these inequalities were the result of a lack of enterprise or resources on the part of Provinces concerned, it could perhaps be urged that it is the duty of the Provinces, which have a long lee-way to make up, to help themselves But when we know that it is the Government of India, which is responsible for different Provinces being in different stages of development, the removal of inequalities appears in a different light, and ought to be considered a charge on national revenues. It is no use relying on things righting themselves in due course. The progress of the nation as a whole is being retarded as the different Provinces cannot keep pace with one another. It is very desirable that the backward Provinces should have the resources for equipping themselves with the requisites, which will enable them to come in line with the more advanced neighbours. The absence of a provision for this purpose is a very strong reason for revising the present settlement. The other reasom why it should be reconsidered is the comparative inelasticity of the Provincial revenues. The figures tabulated in the Statement III will show that while the sources of revenue assigned to the Government of India have, since 1911-12, moved upwards with a marked ease, the Provincial heads of revenues have shown very little capacity for expansion. The Accountant General, United Provinces, in his Appropriation Report for 1921-22 draws pointed attention to the fact that revenues derived from the Provincial heads of receipts have practically remained stationary for the last five years, and emphasizes the necessity of tapping some new sources, if the progress of the Provinces is not to come to a standstill. The same remark can be made with reference to all the Provinces taken together. There are differences of degree. Some of the Provinces have undeveloped economic possibilities, which can, to a certain extent, be counted upon for bringing some grist to the Provincial mills after some time, but in the immediate future there is no hope in that direction. On the other hand, their realisation is likely to involve initial outlay, which will necessitate their being put on the wrong side of the Provincial balance-sheets. The situation is exceedingly unsatisfactory, and it is no wonder that it has filled the popular representatives with dismay. Though the three Provinces of Madras, United Provinces, and Punjab can, if the contributions are extinguished, look forward to improving their finances considerably, all the Provinces cannot feel buoyant collectively even if this pledge is fulfilled in the near future. To these reasons for the re-allocation of the resources must be added another. In most of the Provinces the rural block is very strong in the Legislatures, and what is more is occupying a 'key' position in the party-game. It knows its power and is anxious to assert it. It is prepared to range itself against the progressive forces of the country if it can get a price for its support; and the price, as is well known, is the revision of land revenue policy for the benefit of the landed interests. Even if the Permanent Settlement cannot be secured, it wants concessions which will take away whatever elasticity land revenue may possess under the present circumstances. The recommendations of the Land Revenues Committees of Madras, Punjab and United Provinces are conclusive for substantiating the truth of this remark ; and though till now the Provincial Governments have been able to fall back upon the support of the Government of India, and ward off the attacks of the rural parties, they cannot resist the pressure for long. The land revenue policy is likely to be revised early in order to afford relief to the landed interests of the country. The result of this development, which may be taken as imminent will be the reduction of the receipts from land revenue. Increasing pressure for a more drastic regulation of the liquor traffic will also affect the Provincial finances adversely, and make Excise a very precarious source of revenue. If the receipts from land revenue and excise fall off on account of these parallel movements, the Provinces will find it very difficult to balance their budgets. Bombay and Bengal are the two Provinces, which have demanded the revision of the Mesten Settlement. The other Provinces want the speedy cessation of the contributions. But if a more prospective view of the situation is taken, it is in the interest of all the Provinces that the question of re-distribution of resources should be opened up again, and the fiscal relations of Central and the Provincial Governments established on a sound basis.

There are certain leading principles of wide application, which have to be kept in view in making these re-adjustments. Seligman has called them the principles of efficiency, suitability, and adequacy. The first in order of importance is the principle of efficiency. A scheme of allocation, which assigns a source of revenue to an authority which, from the nature of things, is not in a position to administer it efficiently, is doomed to failure. The effectiveness of the taxes depends upon the nature of the taxes and the character of administration. A tax cannot work well in practice when the authority entrusted with its administration cannot handle the practical problems of the tax, or has not developed the traditions of efficiency and purity on which a great deal must necessarily depend. The principle of suitability is closely connected with that of efficiency. This is, as Seligman has pointed out, a problem as to the base of the taxation. The wider the basis of the tax, the stronger the argument in favour of placing it in the hands of an authority with broader jurisdiction. The principle of adequacy must, it is obvious, be of very great importance, but the fact which gives it a special significance in this connection is that in certain cases it is not possible to harmonise its operation with that of the principle of efficiency and suitability. It may be that the application of the latter will result in an inadequate yield of revenue in one case or more than adequate in another. When this situation arises it becomes necessary to adopt a scheme which provides for a division of the yield of certain taxes. The principle of adequacy also implies that the revenues of each authority sbould be capable of natural expansion to provide for the growing needs of the body-politic. When a scheme is put into operation in a country for the first time, the provision of some transitional measures, to adjust the finances of the different authorities in the State to the new conditions, may be necessary to make it possible for the new arrangements to work without friction.

In every scheme of re-allocation, which can be adopted five methods or their different combinations can be utilised. The taxes may be assessed by the local authorities with additions for the use of the Central Government. The most familiar instance of this method is the American Property Tax. The rate of the levy is determined by the local authorities and to this are added rates imposed by the superior jurisdictions. The reverse of this system is the assessment by the central authorities with addition for local purposes. This method is known to us in the form of local cess collected for the rural boards by the Provincial authorities. We have a more widely known illustration of this method in the four direct taxes of France, which have now been replaced by the new Income-tax The third method is the separation of resources. The separation may mean assignment of absolutely distinct sources to the different jurisdictions— the sense in which it is understood in India, and for which the Americans use a more expressive word segregation. It may also mean that though certain sources of revenue are reserved for Central and others for the local authorities, there are still some common sources of revenue on which both depend The complete separation of resources has, besides India, been adopted in some other countries, but the segregation of sources to use the words of Sir Joshia Stamp, 'is not quite the fetish that it at one time seemed to be.' When separation is partial, we get the fourth method, which has already been mentioned above, the division or apportionment of the yield of the sources of revenue. According to this method the sources of revenue are completely segregated i e, their assessment and administration are assigned either to one authority or the other, but their proceeds are divided between two or more jurisdictions in certain proportions. In the reconstruction of the German tax system this method has been utilised for fiscal arrangements. The Federal authorities control income, inheritance, land transfer, and turnover taxes, but two thirds of income-tax, one fifth of the inheritance tax, half of the land transfer tax, and three twentieth of turnover tax are paid to the States for their requirements. This method is also known in other countries, and its use is becoming common on account of the difficulty of providing sufficient revenues for the different grades of governments in any other way. The last method that can be utilised is the system of payments from central to local governments and from local to the central government. In India, the method has been adopted as temporary makeshift, but it is possible to use it as a permanent part of our fiscal arrangements. In Canada and Australia, the Federal Governments pay to the States a certain sum per capita in return for the surrender of the right to impose custom and excise duties by the latter. In the old German Empire, the States paid what were called the matricular contributions to the Central authorities. There is nothing inherently wrong about this system, and when the relations between the different constituents of a state have been duly adjusted, its use need not offer any insuperable difficulties. The Provincial contributions in India have caused very great resentment on account of certain Provinces having to pay much more than others whose capacity to pay is not less, and the widespread belief that necessity for contributions arises because the Government of India incurs very heavy expenditure for defence. It is under these circumstances advisable to do away with contributions as soon as possible. But apart from this consideration it is not unthinkable that the Provinces should make payments to the Central Government as a permanent measure of fiscal adjustment between the two authorities.

For us the choice lies between these methods or their combinations. It is not possible to discuss the relative merits or demerits of these methods in this Paper. But the lines on which the re-adjustments ought, in the opinion of the writer, to be made, can be briefly indicated. The first, third and the fifth methods do not deserve any serious consideration. The local assessment and administration of most of the taxes is impossible under the modern conditions. The payment of contributions, though theoretically legitimate, is likely to give rise to complications which can and ought to be avoided. A complete separations will lead to fiscal embarrassments, and is on that account undesirable. The fourth method of the apportionment of the proceeds of taxes can be adopted. But it will in the beginning be difficult to fix the proportions in which the yield of taxes ought to be shared. It is not possible to go into details, but it may be stated of the four bases of population, area, revenue, and expenditure, which can be taken into account for fixing the proportions, none will give satisfactory results in the beginning. It is a very convenient method and its use may become necessary later on, but it should not be utilised in the immediate future. The one method that is left to us, if all others cannot be used, is the centralised administration of certain taxes with additions to their rates for Provincial purposes. The Provinces will have certain sources of revenue which will be administered by them, and their yield will also go to the Provincial treasury. But besides these they will have some sources of revenue in common with the Central Government, which will be administered by the latter. The two taxes which, on account of their broad base, should be adminstered by the Central Government, but from which the Provinces can also be allowed to get revenues by way of sur-charges on their rates, are income-tax and inheritance taxes. Income-tax is already an important constituent of our tax system. Inheritance tax has not even been tried as yet, but it will have to be imposed before long. It is now one of the scheduled taxes which the Provinces can levy without obtaining the previous permission of the Government of India. But the Provincial administration of inheritance tax will lead to very great difficulties and should not be even tried. The principle of efficiency requires that it should be administered by the Central Covernment. If this is conceded, then only practical solution of the problem is that the Central Government should be in charge of the assessment and administration of these taxes, and the Provincial Governments should be authorised to increase their rates within their jurisdiction. The arrangement will work well provided three difficulties which will arise in this connection can be overcome. If the Provincial

Governments impose high rates for their purposes, it may happen that the combined Central and Provincial taxes will become so heavy that they, besides causing injustice to the persons concerned, will affect the productivity of the taxes themselves. This possibility, however, can be obviated if the maximum limits upto which the rates can be enhanced by the Provincial Governments are prescribed by the Government of India. The other difficulty which can be easily anticipated, and will have to be provided for, is the difficulty of double taxation due to the source and the recipient of income not being co-terminous. The same difficulty will arise on account of the location of property, and the residence of its owner being different. This difficulty can be got over by laying down some rules as to the relative proportion to be taken by each taxing authority. Here again the supervision of the Government of India will be required in order to bring about uniformity in all the Provinces; and if all the Provinces adopt the same plan, the smooth working of the arrangement can be ensured. The third difficulty to be considered in this connection is not serious and can be easily solved. As the taxes will be assessed and collected by the same agency, the cost of their administration will have either to be shared between the Provincial Governments and the Central Government, or it will have to be completely met by the latter. The increase in the cost of maintenance of a central agency for the administration of these taxes on account of its having to collect the Provincial surcharges as well will not be very heavy and can easily be defrayed out of the Central revenues. As for the assessement of income and property is concerned, all that need be done is that the assessees should duplicate for Provincial purposes the returns submitted by them to the assessing officers. The collection of the additional taxes for the Provinces will entail extra expense, but it will not be heavy and can be placed either on the Provincial or the Central estimates by mutual agreement. This arrangement will not in any way militate against the autonomy of the Provinces. The Provinces should have, within the spheres assigned to them, complete liberty to manage their finances in their own way, without any outside interference. The administration of taxes will, however, be under the control of the Government of India, and the Provinces will determine their own rates. The scheme will give elasticity to the Provincial revenues.

The efficiency of administration will not suffer. The rates will not be allowed to become unduly heavy, and there will be no conflict between the different taxing authorities. This method can only be applied to the direct taxes The custom and excise duties should be the same through-out the country and their administration centralised. The yield in taxes on liquors and intoxicating drugs should go to the Provinces as at present, but the difference in rates and diversity in methods of administration should not be allowed to continue. These reforms, if carried out, will mean considerable improvement on the existing state of things; and if they have been given a fair trial for some time, and still the Provinces or the Government of India need more money the method of the division of yield may be used. But it will not be necessary to have recourse to it for some time to come.

These proposals practically mean revival of the divided heads in another form, which we have been taught to believe are wrong in principle, and create unnecessary intricacies. The scheme of the absolute separation of resources is simpler, and should certainly be preferred if it can give us a satisfactory distribution of resources. But if that is not possible, the alternative is to work out a scheme, which, if less simple, will be more in accord with the facts of economic life. It is not the divided heads of receipts which were responsible for the circumspection of the financial powers of the Provinces. That was due to the fact that the Provincial Governments had to submit their budgets to the Central Finance Department for approval, and the latter made meticulous alterations in the proposals of the Provincial authorities. With the grant of final powers to the Provincial Governments over their budgets, no apprehensions need be entertained with regard to their financial powers being curtailed by their having some sources of revenue in common with the Government of India. It is a pity that these proposals have a somewhat superficial likeness with the arrangements, which are associated in in our minds with extreme centralisation and absence of scope for initiative on the part of Provincial authorities But the fact in itself should not prevent us from making changes, which are essential for a more scientific allocation of resources between the Central and Provincial Governments.

In conclusion, a few words may be said about the need for levelling up the scale of expenditure in the Provinces in which it is unduly low. The Provinces which have a low scale of expenditure are entitled to special help from the Central revenues. They owe their unsatisfactory position to their having received less than their due in the past. They should for a number of years receive special grants from the Central revenues to enable them to work up to the level of the other Provinces. For this provision cannot be made in any scheme, which is intended to serve as an enduring basis of financial settlement. The only way in which this can be done is to guarantee to these Provinces annual payments for a number of years to make it possible for them to adopt a programme of continuous development. These grants should neither be treated as ' doles ' nor as ' subventions.' They will be a means of making belated amends to the Provinces, which have suffered from unmerited neglect in the past. The amounts of the grants to be given in this way should be determined by the needs of the Provinces that have to receive them. No other measure is possible. The case of Bihar and Orissa, Central Provinces and Assam deserve special consideration in this respect.

Statement I.

Showing the financial position of the Provinces in 1920—21.

1	2	3	4	5	6	7	8	9	10	11	12	13
Provinces.	Revenue collected per capita.	Revenue contributed to C. G. per capita.	Percentage of col 1 to col. 2.	Provincial Revenue per capita.	Expenditure per capita.	Expenditure on Genl. Admn. per 100.	Expenditure on G.A. per square mile.	Expenditure on education per 100.	Expenditure on Law & Justice per 100.	Expenditure on Police per 100.	Expenditure on Police per sq. mile.	Expenditure on Public Health per 100.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs,
Madras	5 3	2.9	55%	2.4	2.7	7.6	20.17	32	35	41.6	132	16 7
Bombay	19 3	13.6	69%	5.85	6.53	25.6	39.8	74.5	57	90	143	30
Bengal	7.35	5.5	73.45%	1.85	1.97	8.15	50.5	23.4	36.1	35.2	218	10.8
U P.	3.25	1.29	40%	1.96	2.22	7.6	31.9	26.5	28.8	37.1	166	8.55
Punjab	5.9	2.55	43%	3.35	3.7	13.4	27	36.1	44	47.8	96	15.8
Burma	17.8	5.7	31%	12.	6.7	23.1	12.9	35.5	58.1	140	78.5	26.3
Bihar and Orissa ..	1.48	.38	25.6%	1.1	1.32	5.6	27.6	15.9	23.4	20.4	83.5	5.6
C. P.	3.2	.76	23.7	2.48	3.1	10.35	15	30.65	40.13	40.26	56	11.4
Assam	3.7	.49	16.3	2.5	2.65	13.6	18.6	28	23	39.6	55.6	14.3

Statement II.

Showing the financial position of the Provinces in 1922—23.

1	2	3	4	5	6	7	8	9	10	11	12	13
Provinces	Revenue collected per capita.	Revenue contributed to C. G. per capita.	Percentage of column 1 to col. 2.	Provincial Revenue per capita.	Expenditure per capita.	Expenditure on General Administration per 100.	Expenditure on G. A. per square mile.	Expenditure on Education per 100.	Expenditure on Law and Justice per 100.	Expenditure on police per 100.	Expenditure on Police per square mile.	Expenditure on Public Health per 100.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras	5.35	2.25	44 %	2.95	2.96	30	90	36	22.3	48	143	15.2
Bombay	21.2	14	66 %	7.3	7	58.8	92	88.5	33.5	89	139	31.5
Bengal	7.2	5.05	70 %	2.1	2	25	151	26.2	24.1	39.5	240	16.6
U. P.	3.02	.78	26 %	2.25	2.35	30	125	30.6	14.5	38	156	8.65
Punjab	5.3	1.26	24 %	4	4.3	47	96.5	47.5	21	58	120	19
Burma	12.9	5.65	44 %	6.6	7.75	67	38	50	36	105	60	28.5
Bihar & Orisa	1.65	.2	12.2 %	1.45	1.36	20.3	83	15.7	9.9	23.4	96	5.9
C. P.	4.1	.72	17.5 %	3.7	3.5	34	47.7	37.8	22.1	40.5	56.3	12.7
Assam	2.9	.48	16.5 %	2.42	2.65	33.5	47.5	30	11.8	40	57.5	16.7

Statement III.

Showing the receipts from the Major Central and Provincial heads of revenues from 1911-12 to 1922-23

Heads of Revenues.	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17
CENTRAL						
Customs.	9,70,28,499	10,79,58,640	11,33,73,302	9,52,08,010	8,81,08,293	12,98,87,728
Income tax	2,47,93,181	2,61,35,963	2,92,53,745	3,05,50,999	3,13,51,643	5,65,94 498
Salt.	5,08,68,180	5,00,15,605	5,16,79,577	5,86,61,841	5,47,13,802	7,23,93,891
Opium.	8,94,19,170	7,68,68,873	2,43,73,178	2,35,83,274	2,87,02,712	4,74,00,073
PROVINCIAL.						
Land Revenue	31,14,70,456	31,92,37,015	32,08,73,629	31,83,23,088	33,04,67,411	33,06,18,976
Excise	11,41,46,285	12,41,68,787	13,34,14,505	13,28,53,214	12,94,83,132	13,82,38,495
Stamps.	7,22,26,940	7,60,36,726	7,97,74,387	7,62,30,650	8,15,04,487	8,66,50,437
Forest.	2,92,82,689	3,22,95,131	3,34,46,081	2,97,09,784	3,11,16,367	3,70,61,930
Registraton.	66,87,937	72,30,337	77,84,426	72,79,423	77,83,187	81,08,728

(Continued) :—

Statement III.—(*Concluded*) :—

Showing the receipts from the Major Central and Provincial heads of revenues from 1911-12 to 1922-23.

Heads of Revenues.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.
CENTRAL						
Customs.	16,55,48,819	18,18,09,614	22,48,32,802	31,89,85,157	34,40,98,381	41,34,65,362
Income-tax.	9,46,21,555	11,63,76,940	23,20,78,443	22,19,28,478	22,17,54,823	18,13,94,485
Salt.	8,24,92,306	6,41,69,830	5,74,79,319	6,76,45,308	6,34,37,848	6,82,46,112
Opium.	4,61,83,538	4,93,36,670	4,55,62,212	3,53,41,234	33,07,24,798	3,78,92,068
PROVINCIAL						
Land Revenue.	32,41,08,686	31,63,49,164	33,91,49,146	31,97,48,469	34,12,17,273	35,35,15,327
Excise.	15,24,25,600	17,33,62,773	19,25,94,029	20,43,65,359	17,18,61,914	18,55,21,656
Stamps.	8,59,12,830	9,02,84,633	10,91,17,665	10,95,68,483	10,88,06,852	11,95,16,740
Forest.	4,09,69,258	4,68,18,832	5,36,75,794	5,41,43,496	5,83,28,656	5,52,14,073
Registration.	79,13,852	85,89,774	1,07,54,940	1,12,03,534	1,13,55,677	1,20,44,870

DISCUSSION ON PROF JOSHI'S PAPER.

Professor Duraiswami Aiyar said:—

" I should like to point out that far too much has been made by the Government of India of the financial clean cut following the administrative clean cut between the Central and Provincial Governments. I do not know if there is any country in the world where there is such a complete separation."

" It may very well be that the Central Government is most competent for the discharge of particular services on which expenditure is to be incurred, while the taxes which it is particularly fitted to levy and collect may fall short of or be in excess of the amounts required by it. The same considerations apply to Provincial Governments, as well."

"According to the scheme of separation, customs duties are within the province of the Central Government, and excise duties are within that of Provincial Governments."

" A decrease in customs duties on particular articles consumed by the bulk of the people may leave larger spending power in the hands of the people leading to increased expenditure in drink and thus to an increase in excise revenue. Thus there is an interlocking of excise and customs. Therefore a clean cut ought not to be made between the Central and Provincial Governments."

Prof. P. S. Lokanatham said:—

" Whatever justification the Gvernment of India had in asking for Provincial contributions in 1920, they were not wise in continuing the demand any longer. The first thing that they ought to do is to abolish all contributions and that must be done immediately. It would not be impossible to carry out this measure; the Government of India were able to tide over greater difficulties and make good other deficits as for instance in 1921 when the railways caused a deficit of nearly 9 crores, the Meston award was, according to the speaker, probably the fairest under the circumstances, but it had the singular misfortune of not satisfying any Province at all. But I quite sympathised with the able and eloquent plea of Professor Joshi in favour of Bombay, that only showed that the task would not be over when contributions were abolished. The whole question of Central and Provincial finance must be gone through again and ways and means ought to be found to enable the Provinces to go ahead with their nation building schemes. Prof Joshi's suggestion of making income tax a purely Provincial head of revenue cannot be accepted, unless the Government of Bombay takes up the task of public defence !!! To my mind the only feasible course is to devise a scheme whereby the proceeds of the income-tax may be divided between the Central Government and Provinces. The Provincial Governments may be empowered to levy an additional rate over the general rates of the Central Government or there may be a sharing of the revenues in some proportion. I have not thought out the question fully but suggest that another remedy may be that taxes on income from real property may be reserved for the Provinces and that taxes on all other forms of income reserved for the Central Government

Prof. Thompson said :—

' I agree thoroughly with all that Mr. Bhatnagar has said about the necessity of abolishing the Provincial Contributions, and the complete separation and independence in financial resources of the Central and Provincial Governments.

In the Paper which I read before this conference in 1920, I had suggested two ways of doing this, either by a progressive super-tax on large incomes from agricultural land, or by letting the Central Government take the part of the excise revenue which is true excise on production, and leaving the local licensing to the Provinces. I then favoured the latter which would have the advantage of giving a uniform rate of excise for all the Provinces. But on the whole, I now favour giving the Central government the income-tax and super-tax on large agricultural incomes, as that will have the advantage of giving a uniform administration of the income-tax, and should make its administration easier. If that is done, it will probably be necessary to let the Provinces keep the whole of the Excise in spite of possible inequalities in the taxation of production.

There appear to me to be two great inequalities in the Indian tax system. The first is the inequality between the taxation of agricultural incomes and non-agricultural incomes. The second is the inequality between the taxation of agricultural land and of urban or non-agricultural land. The first of these inequalities would be met by the introduction of a super-tax on large agricultural incomes. The second I propose to meet by substituting a tax on land values both urban and rural for the land revenue. I mean a tax on the selling value or capital value of land.

The tax on land values has three great advantages First, since, it is a tax on capital value, it reaches land which is not being used, it forces into use land which is being held for speculation, and is thus a tax on speculative values. Secondly, as the selling value is net rent capitalised, it is a much better measure of the actual surplus produce of land than can be obtained through the long and costly processes of the land revenue settlement. Thirdly, the tax can be made elastic by changing the rate on the total value of the land, so as to obtain the desired revenue. And we should have in India the additional advantage of getting rid of the many difficulties of the present land revenue, the Permanent Settlement, the policy of not increasing it by more than one-third where rentals are rising rapidly as in the Panjab, and some of the difficulties of settlement, though doubtless there would be difficulties in obtaining the selling value.

(I may add that I do not favour the exemption of buildings, but would lay the tax on the value of the land and all improvements attached to the land, in other words, on the value of all immovable property, for the reason that agricultural improvements such as roads, levelling, fertitizing, etc., cannot be separated from the land for valuation, and we shall again have discrimination if we treat diffirently buildings which constitute the chief item of improvements in the case of urban land.)

(The best book on the subject is Miss Sheftet's "The Taxation of Land Values.")

Professor R. M. Joshi replying to the discussion on his Paper said:—

The main thesis in my Paper is that as a result of the Reforms the Departments wherein people require rapid progress and hence rapidly increasing expenditure, viz , education, sanitation, medical relief, rural civil works, agriculture, industries etc. have been transferred to the Provinces whereas the sources of revenue handed over to them are inexpansive with the exception of liquor excise, the revenue from which public opinion would rather see reduced to zero. The Central Government, on the other hand, relieved of all these responsibilities, has appropriated to itself the two most expansive sources of revenue viz customs and income-tax. This unsatisfactory financial arrangement has been the root cause of the failure of the Reforms in all Provinces. It is not a question merely of abolishing the Provincial contributions. Their abolition would of course mean the rectification of a longstanding piece of injustice to certain Provinces and would enable those Provinces to make up the leeway and come up to the level of the relatively more advanced Provinces. But the abolition will not give these backward Provinces an expansive source of revenue for further development. So the main trouble would still remain

If the present arrangements were looked at from the rural people's point of view, what would we find ? We make the rural rayat pay land revenue, he pays customs duty for the coarse cloth he wears, the match he lights, kerosene oil he burns; he pays a tax for his salt; if he is silly enough to drink liquor, he pays a tax; if he is stupid enough to go to the court, he pays again. He contributes to the national Exchequer in a hundred ways like these, but if he wants a school in his village, we tell him there is no money; if he wants malaria stamped out, there is no money; if he wants a travelling dispensary or a stationary hospital, there is no money; if he wants the road to the town made or mended, there is no money. To add insult to injury, as it were, we tell him that he is unwilling to tax himself for these local purposes, he ought to pay more local rates. We take advantage of his ignorance in saying all this, after having collared the biggest local rate he pays viz. land revenue.

The right solution out of the present impasse would be to treat land revenue as if it were a local rate. The machinery for assessment and collection might remain as at present We must remember as Mr. Doraiswamy Aiyar pointed out in his remarks, that the right authority for assessment and collection of revenue is not necessarily right authority for spending it satisfactorily As Sir Percy Thompson told us in his lecture the other day, the national Government in England collects a special motor tax and hands over the whole of its proceeds to the local authorities to be spent in keeping the roads within their jurisdiction in proper repair. If land revenue thus becomes practically a local rate, the Provincial Governments must have some good osurce of revenue for their other needs. Such a source would legitimately be a tax on the incomes of individuals resident within their respective territories Some speakers have wrongly accused me of looking after the interests of my own Province, Bombay, in asking for a transfer of the tax on individual incomes. But I have not done it at the cost of Provincial contributions but in addition to the abolition of those contributions. So the backward Provinces will have the money, paid by them at present as contribution, in lieu of the share of the income-tax at present taken away from Provinces like Bombay. And by the time the backward Provinces make up the leeway, their own income-tax receipts should have grown as they would have an immediate interest in achieving that growth, which at present they do not have

The Central Government under this scheme would only have customs and the commercial departments, and perhaps a new corporation tax on the receipts side and on the expenditure side mainly defence and interest on unproductive debt. And the two sides can be made to balance if in defence India spent strictly for her own defence and if the policy of trust were followed in Military matters as it was introduced in Civil matters by the Montagu-Chelmsford Reforms. I have been told that I am asking for the moon in saying all this. I have said that in my own Paper in precisely the same words. The Economic Conference is not the place to discuss the practicability of my scheme. The right place for that would be the Indian Legislative Assembly.

SEPARATION OF THE RAILWAY FROM THE GENERAL BUDGET.

By

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The separation of the Railway Budget from the General Budget of the country, which has just been given effect to as a convention by the Assembly, marks the beginning of a stage towards which the nation had been groping its way during the last two decades and more. The defects of a system whereby Railways depended on the exigencies of the general financial conditions of the country have long been noticed. The Acworth Committee only gave it a decent burial by their insistence on overhauling the whole financial machinery. They were impressed by certain obvious facts ; by the uncertainty of the amount of money allotted for Railways in any year, by the sudden curtailment and withdrawl of grants once made, by the equally sudden allotment of new and large amount at the close of the year which must be expended within a short space of time for fear of lapse, by the lack of commercial accounting and by the failure to provide for proper renewals and repairs and to maintain a reserve ; and resolved that the system of railway management be radically altered.

In trying to give effect to their recommendations the Government of India were faced with the difficulty of calculating and arriving at a basis of agreement that would on the one hand be fair to the public and on the other not unfavourable to the Railways. The difficulty was due to the extraordinary fluctuations in the net gain from Railways which was varying within fairly wide limits. They were, therefore, content for the moment with remedying another serious defect pointed out by the Committee, *viz.* the system of inadequate and lapsed grants. Indian Railways were run on the assumption that they went out of business at the end of every year and hence the capital sum allotted in a year could not, under any circumstance, be carried over to the next. This evil was remedied in 1921 by allowing the Railways to prepare their programme on a five year basis by allotting 150 crores of rupees for the years ending with 1926-27 and by recommending that there will be no more lapses and that money not spent might be carried over. This reform by itself marked a definite advance towards end the Acworth Committee had in view. For the first time Railways were in a position to plan ahead and to carry out their schemes of improvement without fear that they will be stopped in the middle of the work owing to insufficient or lapsed grants.

But this was not enough. The 150 crores of capital that was allotted could be spent only on rehabilitation and renewals and not on ordinary repairs, for which money could come only out of railway revenues. But the capital expenditures were so interwoven with and dependent on revenue expenditures especially in the case of renewals and repairs that without a guarantee of permanent revenue expenditure, capital grants by themselves were found to be often useless. Hence along, with guaranteed capital grants there were also required guaranteed expenditure grants. And this could only be had by ending the system of fluctuating budgetary grants for annual repairs.

It was, therefore, early realised that separation of Railway finance could not long be deferred, but the problem was an intricate one. Absolute separation in the sense that Railways were not only to be left to manage their business independently but were also to be allowed to have complete monopoly of the profits they earned was not to be thought of. Apart from any question of principle, there remained the fact that the Meston Committee in fixing Provincial contributions proceeded on the assumption that Railways would yield to the Central Exchequer a net sum of nearly 11 crores annually. Such a large sum could not well be surrendered without upsetting the balance of the budget. There was also a general feeling, natural and legitimate, that money for Railways had been found by the taxpayer, that in the past Railways had worked at an enormous loss to the public and that now when they were becoming a paying concern, it would not be fair to allow them to go free without getting a share of their profits. It was therefore clear that some working arrangement must be arrived at whereby they might be made to earn a decent dividend for the share holder *i.e* the public. But the determination of the share was beset with difficulties. The operating ratio of the Railways had increased tremendously during the last few years and although the Inchcape Committee did a distinct service in fixing the limit of the working expenses at 64 crores, there was a feeling that it was only an upper limit and that working expenditures could still further be reduced, leaving a larger net income. Such were the complexities inherent to the problem. In the end, however, separation was effected on the basis that the general revenues were to get each year, whatever be the conditions of Railways, a sum equal to 1 % on the capital at charge of commercial lines, excluding capital contributed by Companies and Indian States, plus one-fifth of any surplus profit remaining after payment of this fixed revenue and of all interest obligations.

The effect of this may be seen by a comparison of the net gain from Railways to the general revenues in 1923-24, the year before separation and in 1924-25, the year after separation.

	Gross receipts.	Gross expenditure including interest payments etc.	Net gain,
1923-24. Revised Estimate. in crores of Rs.	94.45	88.16	6.29

1924-25

Basic year 1923-24.
Crores of rupees.

1% on capital at charge Commercial lines.		5.44
1/5 of the surplus profits.		.88
Total		6.32.
Deduct loss in working strategic lines	.31	
Interest on capital at charge strategic lines	1.02	1.33
Net gain from Railways		4.99

This shows that whilst in 1923-24 the Government of India got a profit of 6.29 crores from Railways, in the year after separation they will get 4.99 crores. At first sight the difference does not seem to be much ; it is just a little over a crore and a quarter. But one important fact must not be overlooked Since the beginning of this year, a significant change has been effected in the matter of distribution of expenditure with regard to Railway Annuities and sinking funds Up to the current year annuities for the purchase of Railways which consist of a capital portion and an interest portion, and sinking funds were all debited to the accounts of Railways, and in calculating the net gain to the general finance such sums were deducted from the receipts of Railways. But in 1924 25 the capital portion of annuities and sinking funds have been taken as part of the debt of the country and are paid for out of general revenues. For a real comparison therefore of the net gain to the Central revenues in the years 1923-24 and 1924-25 we must either add the capital portion of annuities and sinking funds to the figure of the former year or deduct the amount from that of the latter. This would show that comparing like with like we would get a net gain really of 4·99 crores minus 3.95 (being capital portion of the annuities and sinking funds) leaving 1.36 crores only as compared with 6.29 crores in 1923-24.

But one need not regret the smallness of the contribution. Indeed from one point of view it may be urged that the contribution should, if anything, be very little. A tax on communications will injuriously affect trade and industry and the seeming gain from a larger contribution may be purchased at too high a cost. Further, it may also be argued that the relief afforded to the taxpayer by getting a share of railway profits could equally well be gained by his sharing in the facilities of cheaper fares and rates, that railways would be in a position to afford, were no contribution levied. But the argument is valid subject however to two considerations. In the first place, Railways may benefit certain sectional interest and not the general public. The danger is real although often not obvious. The second is that there is no certainty that the freedom from contribution would inevitably lead to the cheapening of fares and rates and would not, by reducing the incentive to economise, increase the working expenditure. It is therefore imperative that Railway administration should regard as one of its first objects the task of affording better conveniences and facilities to the public.

There is one other point of great interest raised by the proposal for separation. Of all the beneficent results expected to arise out of the reform, the possibility of making arrangements for depreciation and for building up a reserve overshadows the rest. Indian Railways which constitute the biggest commercial concern of the country have been working on unbusinesslike lines with absolutely no reserves. The defect can now be set right. And it is important to remember that it is possible within a short period of time to build up such a reserve that will make their position very strong financially. In his speech in the Assembly Sir Charles Innes stated that the Railways were expecting to carry to the reserve as much as 2½ crores of rupees this year. But that by no means represents the limit which could be attained in future years. For it is a well-known fact that for some time past our Railways have not been working on the most efficient lines. Of course the financial system was partly responsible, but its evil influence had been conveniently exaggerated. To take one instance the amount of capital locked up in stocks of stores held in 1921-22 was 34 crores of rupees, and it was found later that the book value of the stores was above the actual market price by as much as 50 %, and hence arrangements had to be made last year to write off the debt by distributing it over a series of years. No one can seriously contend that this is the direct outcome of a system of inadequate allotments.

There can be no doubt that the working expenses of Railways could be reduced much further than has been done so far. The wastes due to losses of coal and to the consumption by defective engines, the insufficient use made of engines and rolling stock, the existence of defective stock, the high traffic expenses, the high scale of expenditure on maintenance and renewals of permanent way, the loss due to the purchase of stores in the dearest market—these point the direction in which improvement may be effected. Other countries, notably America, have made headway in bringing to bear upon problems of management the results of scientific studies. Indian Railways have been singularly free of any desire to investigate, record, and deduce. Again, if India follows the wake of other countries and effects a grouping of Railways, considerable economies could be realised in their working. Rolling stock and other resources could be pooled, rates could be simplified, competition lessened with great benefit to all.

The above considerations show that with efficient working the amount of money that could annually be carried over to the reserve would be considerable. When the reserve reaches a fairly high figure it may well be utilised for the purpose of writing down capital. So that there may be effected a continuous and steady reduction in the amount of captial at charge involving a corresponding deminution in the amount of interest obligations. It may not be possible even at a distant time to write down capital till it reaches zero. But if such an object be kept steadily in view and worked up, there will be less and less liability for the Railways to incur, and rates and fares could conveniently be reduced without any fear of loss. Such a consummation is one devoutly to be wished for.

DISCUSSION ON MR. P. S. LOKANATHAM'S PAPER.

Mr. M. A. Hasan said:—

" Regarding the statement that Indian Railways have no reserves and sinking fund, I have to say that Indian Railways were keeping sinking funds. They were paying annuities. It came to the same thing, if a sinking fund was formed out of the revenues of the existing debt paid off by means of annuities."

INDUSTRIAL FINANCE.

BY

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I.

Three typical forms of organisation for the financing of industries may be noted.—(1) the British Investment Trust, (2) the German Great Bank and (3) the Industrial Bank of Japan.

I. The British Investment Trust specialises in the raising of funds for investment in long term securities. The funds of an investment trust are derived chiefly from share capital both ordinary and preferred and from borrowed capital in the shape of debentures secured by a floating charge on the assets of the Trust. A floating charge unlike a fixed charge leaves the disposition of investments in the hands of the company so long as it is a going concern. The general rule with regard to debentures in an Investment Trust is that the total issue does not exceed in amount the outstanding share capital. An Investment Trust hardly ever accepts funds in the shape of short term deposits. A certain amount of overdraft from Joint Stock banks is shown in balance sheets but this is generally held against the anticipated recall of long term funds which are about to mature.

The success of a banking concern admittedly depends on a wide distribution of risks and on sufficient liquidity of assets. Of these the second principle applies relatively little in the case of an Investment Trust as the bulk of its liabilities are not repayable on demand or at short notice. Hence the main test of the success of an Investment Trust may be said to consist in the manner in which the risks of investment are distributed. The industrial system of England lacks variety as compared with Continental countries like Germany, but on the other hand, England's position as the principal capital market of the world enables it to find in a wide geographical distribution the security which it cannot find sufficiently in the variety of its industrial businesses at home.

The following figures regarding the investments of the Anglo-American Debenture Coroporation Limited in 1922 show the variety of their distribution.:—

	£
British Government Securities	417,049
Great Britain and other Colonies	
(Industrial and other companies)	618,304
United States of America :—	
Railway Companies	100,777
Tramway, Light and Power companies	136,158
Industrial and other companies	64,807
South American and other foreign countries :—	
Railway companies	193,275
Tramway, Light and Power companies	74,348
Government Securities and Industrial Companies	135,361
Total ..	1,740,079

The chief factors which have led to the success of the Investment Trust may be summarised as follows :—

(1) Distribution of investments both geographical and industrial. The Articles of Association of most Investment Trusts contain a stipulation as to the maximum proportion of its funds which may be invested in any one security or business. The maximum seldom exceeds 10 % and very often is as low as 5 or 3 %.

(2) The rate of interest at which long term funds in the form of debentures and preferred share capital may be raised is sufficiently low to make possible the distribution of a satisfactory rate of dividend on ordinary share capital.

(3) The unit value of both proprietary and borrowed capital is fixed sufficiently low to attract all classes of investors. The ordinary value is £5, but it is sometimes as low as £1.

(4) The Investment Trust generally insists on the creation of a sufficient reserve fund to meet unforeseen contingencies especially the depreciation of securities. The earnings derived from the sale of securities are generally credited to the reserve fund. On the business side, this is what distinguishes an InvestmentTrust from the ordinary promoting company which employs the earnings from sale of securities for the distribution of dividends.

(5) An expert staff is available to every Investment Trust, either singly or in groups to advise on the selection of securities.

II. The German Great Bank unlike, the Investment Trust, does not specialise in investment business but combines the functions of an investment bank with those of an ordinary commercial bank. The non-specialised character of German banking as compared with English banking may be traced primarily to two circumstances,—first, the relative poverty of the German people at the time of the great industrial awakening in the seventies of the last century, which on the one hand compelled industrialists to resort to the ordinary credit banks for accommodation and on the other hand gave the banks exceptionally large opportunities of doing business ; secondly, the rapidity with which the industrial movement proceeded in Germany as compared with England which gave no time for the development of a suitably organised credit system nor for the growth of a class of population in possession of funds available for re-investment.

The principal points which distinguish a British Investment Trust from German Great Bank may be summarised thus :—

(1) The investment Trust devotes itself exclusively to investment business and does not, like the German Great Bank, provide commercial finance also.

(2) The Investment Trust is concerned entirely with finding suitable investments for its funds. Its aim is primarily financial and not industrial like that of a German Bank. Investment Trusts are unwilling to adopt the plan, common in Germany, of associating themselves with the fortunes of a new venture until it has proved its worth and can suitably be sold to the investing public ".*

(3) Following from this, the Investment Trust invests the bulk of its funds in foreign securities, whereas the German Great Bank has pursued steadily the aim of developing home industries.

(4) The Investment Trust derives its funds from share capital and deposits. The latter does not raise funds by debentures, but its proportion of share capital to deposit liabilities is much higher than in an English joint stock bank.

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* Lavingtion, page 213.

(5) A German Bank secures a controlling interest in the industries which it helps to finance partly by the holding of shares and partly by the appointment of representatives of the bank to the directorate of the industries. An Investment Trust chooses its investments on expert advice but does not maintain any active contact with the business in which investments are made.

(6) The fact that German Banks derive their finance so largely from dposits renders it necessary to provide a sufficient reserve of liquid assets, generally a third of the outsanding deposit liabilities. Unlike the Investment Trust the German Bank observes the principles of liquidity of assets as well as distribution of risks.

III. The Industrial Bank of Japan founded by law in 1900 represents a third type of organisation for the financing of industries. The main features of the bank may be brought out by comparing it with the other types.

(1) The Industrial Bank deals chiefly in investment business. Unlike the Investment Trust it combines this with a certain amount of ordinary commercial finance, but unlike the German Great Bank the commercial business of the bank is regarded as purely subsidiary.

(2) While the Investment Trust derives its borrowed capital chiefly from debentures and the German Bank from deposits, the Industrial Bank derives it from both debentures and deposits.

(3) The total amount of debentures in an Investment Trust is limited to the aggregate amount of share capital, whereas in the Industrial Bank debentures may be raised up to ten times the paid up share capital but not so as to exceed the total of the outsanding loans and advances granted by the Bank.

(4) The object of the Industrial Bank is industrial first and last. The object of an Investment Trust is financial first and last, while the object of German Great Bank is partly industrial and partly financial.

(5) The Industrial Bank, unlike the other types, is closely and directly identified with the Government. (*a*) The business is under the direct control of the Government who appoint the President,

Vice-President and other members of the directorate and who exercise a general right of supervision over the business through the Minister of Finance. (*b*) A considerable part of the share capital is subscribed by the Government and (*c*) the Government offered a guarantee of 5 % dividend on the capital for the first five years.

6. Unlike the British and German types, the Industrial Bank of Japan draws a considerable part of the share capital (more than a third in 1914) from foreign capitalists.

REFERENCE.

(1) Foreign Credit Facilities in the United Kingdom—Lelan R. Robinson (Columbia University).

(2) The English Capital Market—F. Lavington.

(3) The German Great Banks—J. Reisser. } National Monetary Commission.

(4) Miscellaneous articles on German Banking }

(5) Evidence before the Indian Industrial Commission by Findlay Shirras, Vol. V.

(6) Japan Year Book.

II

The question of State aid to industries has been so frequently the subject of discussion and in some cases of legislation in India in recent years that it is worth while to consider the methods adopted in relation to it.

Of direct financial assistance by the State in the form of loans and investment of public funds in specific industries, there is hardly any trace either in Germany or in the United States of America. State assistance in these countries is confined to indirect aids in the shape of protective duties, bounties, preferential railway rates, technical assistance, education and research. In Japan financial assistance to industries apart from these various indirect aids, has been given since 1902 almost entirely through the Industrial Bank of Japan in the shape of subscribed share capital, advances and guarantee of interest.

The policy of direct financial assistance by the Government has been in evidence in the United Kingdom, notably since the outbreak of the war.(1) The most important instances of it are to be found in three industries— dyestuffs, sugar and shipbuilding. (1) A company for the manufacture of dyes in Britain, the British Dyes Limited, which later on was amalgamated into the Dyestuffs Corporation Limited, was organised in 1915. The Government assisted the company in the following ways. They undertook to subscribe £1 for every £1 of capital subscribed outside up to £1,000,000 and £1 for every £4 subscribed outside over £ 1,000,000. The Government could nominate two directors out of a total directorate of 6 to 12 and had power to veto any resolution of the directors which encroached unduly on the business of any manufacturers of products other than dyes or gave undue preference to any customer of the company's products. Ten per cent of the residuary profits must be credited to a sinking fund for repayment of the Government loan. Dividend may not exceed 8 per cent ; if the amount available is more than sufficient for such a demand, the sinking fund contrbution is to be raised to 15 per cent. Besides the capital subscribed by the Government, they gave a grant in aid of research of £ 1,00,000.

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(1) Government Investment in Registered Companies 1921 (H. C. 250.)

(2) A British Company, the Home Grown Sugar Limited, was formed in 1920 to take over a previously existing concern for the experimental production of beet sugar in England. The Government undertook to subscribe for a number of ordinary shares of £ 1 each not exceeding £ 250,000 equivalent to the number allotted to public subscribers. The Government also guaranteed interest at 5 per cent, for ten years, on the shares allotted to public subscribers and undertook to take no interest on its own shares till the public subscribers had received 5 per cent on their shares.

(3) In 1903 the British Government by a contract with the Cunard Steamship Company provided for a loan of £2,600,000 to be repaid in twenty years at a rate of interest of 2¾ per cent. The object of the loan was to enable the company to build two large steamers for the trans-Atlantic trade which would be available as auxiliary cruisers for Admiralty purposes.

An interesting instance of financial assistance by the State towards industrial development in the United Kingdom is to be found in the activities of the Development Commission which was constituted by Parliament in 1909 for the economic development of the United Kingdom A sum of £ 2,900,000 was assigned for the purpose by statute. The Development Commission is not strictly relevant to the subject of this study because, (1) the economic development which it aims at is primarily the development of the agricultural and fishery resources of the country, (2) it seeks to secure development largely through educational means viz. the extension of research and fresh knowledge and (3) it is forbidden to offer assistance to profit-making concerns. Nevertheless, there are features of the Development Commission which it is worth-while to note on account of their general application to schemes of State aid to industries. (1) The grant on which the Commission operates is secured to it by Statute and is therefore borne on the Consolidated Fund. " This method made it possible to look ahead over a period of years and to frame programmes independent of the risk and uncertainties besetting schemes based on the yearly votes presented to Parliament."(1). (2) The Development Commission who have a free hand to consider schemes on their merits and distribute grants are appointed under the Development Act as " an independent quasi-judicial body constituted as a Royal Commission, not responsible to any Minister and to that extent insusceptible to political pressure." (2)

The position of the principal industrial countries in the West in regard to direct State aid to industries may be summed up thus. In most countries no direct financial assistance is given to industries by the Government. Where such assistance is given as e.g. in the United Kingdom, it is given not with a view to promoting general industrial progress but with a view to safeguarding specific industries which are either (*a*) basic industries or (*b*) industries essential to national safety or sustenance.

In India until recently the only form of financial assistance given to industries by the Government, apart from the financing of "pioneer" Government industries and grants in aid of technical education and expert advice and assistance by the Departments of Industries, appears to have been given in the form of loans under the Agriculturists' Loans Act. But it must be pointed out in regard to these loans that (1) the loans have been granted entirely in respect of agricultural industries e.g. the purchase and maintenance of machinery for pumping and boring operations, (2) the loans are granted in small amounts hardly ever over Rs. 5,000 and (3) the formalities in connection with the grant of these loans have caused such great delay and annoyance as to render the provision almost ineffective.

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(1) Report of the Development Commissioners 1920.

(2) Ibid.

The principle of direct Government assistance to industries was given legislative sanction by the State Aid to Industries Act passed by the Madras Legislative Council in 1922. Similar legislation has been enacted or has been under consideration in other Provinces. The chief provisions of the Act may be summed up as follows. The industries to which aid may be given under the Act shall be such as have an important bearing on the economic development of the country and shall be, (*a*) new or nascent industries or (*b*) industries to be newly introduced into areas where such industries are undeveloped or (*c*) cottage industries. No aid shall be given to any joint stock company unless it is registered in India on a rupee capital and has a minimum proportion of Indians on its board of management. Aid may be given under the Act in a variety of ways—loans, guarantees of advances from banks, subsidy for research and purchase of machinery, subscription for share capital and debentures, guarantee of a minimum return on capital and grant of Government land, raw materials etc. The Government is assisted in dealing with applications for loans by a Board of Industries partly elected and mainly non-official. All moneys payable under the Act may be recovered as if they were arrears of land revenue. It will be noticed that both in the selection of industries for Government assistance and in the forms in which assistance may be given, the Act lacks nothing in comprehensiveness. The funds required for distribution under the Act are intended to be raised by the Provincial Government as loans under Devolution Rule 2 (*d*) for the Provincial Loan Account.

State aid to industries in the form of investment of public funds in private undertakings has been much more in evidence in Native States. In Mysore loans have been granted corresponding to the loans in British India under the Agriculturists' Loan Act for the installation of machinery in connection with agricultural operations and in addition special loans have been granted occasionally for the financing of industries such as the glass bangle industry and the manufacture of matches, the loans being recoverable as if they were arrears of land revenue. In Hyderabad the Government have subscribed for debentures of the value of Rs. 20 lakhs in the Singareni collieries and share capital of Rs. 5 lakhs in the Shahabad Cement Company. (1) In Travancore the Government hold debenture bonds worth Rs. 45,800 in the M. P. M. T. and A. Company Ltd., and shares to the value of Rs. 3,05, 300 in the Travancore Sugar Company Limited. (2) In the Travancore Paper Mills Company which was started in 1817 and was wound up in 1893, the Government held shares worth Rs. 25,000 and invested in the shape of advances nearly Rs. 2½ lakhs. Besides, the Government had also undertaken to guarantee interest to the shareholders at 4 per cent. for 15 years. In the Cochin State the Government have invested funds in a number of local industrial concerns, the chief of which is the Cochin Tanneries Ltd., in which the Government hold shares worth Rs. 1,20,000, roughly a third of the total share capital and have besides offered a guarantee for a loan of Rs. 50,000 from banks.

One difference between Mysore and the other States in this respect is that in Mysore the loans have been given as part of a general policy of active industrial development by State aid and the funds required for these loans have been raised generally by public loans. In the other States no general programme of industrial development of State assistance is discernible and such assistance as has been given is looked upon primarily as opportunities for the investment of accumulated balances of the State.

III

An industrial concern requires two kinds of capital—(1) initial capital including not only capital required for starting an industry but also capital required for extending and developing an industry and (2) working capital required for meeting the current expenses of an industry. Working capital is required for short periods only and hence is normally supplied by existing commercial banks in India. With the exception of the Exchange Banks which confine their operations to oversea business, Joint Stock banks in India frequently give the accommodation necessary for meeting the working expenses of industrial concerns. Loans for this purpose are given either on personal security i.e. as clean loans or on the security of readily saleable goods i.e. as produce loans. The problem, therefore, in industrial finance in India is that of organising a suitable agency for the provision of initial capital.

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(1) Hyderabad Budget 1923-1924.

(2) Travancore Budget 1922-1923.

At present the initial capital required by an industrial concern is raised generally by the promoter himself and his friends or by specific public subscription. This is an inadequate method since it makes the provision of capital dependent on the standing and connections of the promoter and not sufficiently on the business possibilities of the particular concern. Such a system besides being a handicap to promising industrial undertakings offers little scope for the promotion of a general habit of investment in long period securities. The habit of investment as distinct from isolated investments can arise only if there is a well established organisation for industrial finance.

Initial capital is not infrequently raised by borrowings from Joint-Stock banks and from private indigenous bankers. This however is not merely an unsuitable but a disastrous system of raising capital for industrial undertakings. (1) Such loans are given for short periods although they are frequently renewed, constant renewals practically giving them the aspect of long term loans. This is a harassing system because it leaves the continuance of the industry at the mercy of the financing bank. (2) The interest payable on loans of this class is much higher than an industry, especially a new industry, can afford to pay. Interest on short term loans is fixed with reference to the possibility of earning on them a sufficient return over the whole year, allowance being made for seasons of slack business. The interest on individual loans therefore is fixed at a rate higher than what may be called the normal rate of interest. (3) With the exception of the indigenous bankers whose rates are higher, banks in India do not generally lend on the security of immoveable capital which is the most suitable form of security from the point of an industrial concern. The rule is rigid as far as the Imperial Bank of India is concerned. Indian Joint Stock banks although they make departures from the rule still necessarily fight shy of fixed capital as a security for loans.

The objections to an individual concern deriving its permanent capital from commercial banks may be summed up in the statement that debits and credits in a bank must correspond in character, period and terms

With regard to the form which investment banking must take in India, the following general points may be stated.

(1) Institutions analogous to the British Investment Trust will not meet the purpose. Their aim is primarily financial, and they therefore confine their dealings to established securities. They are therefore unsuitable and inadequate in a country which is more or less at the beginning of its industrial development. What we need is an organistion which, while reasonably safeguarding the interests of investors, will make it one of its primary objects to forward the development of indigenous industry.

(2) Direct financial assistance to industries by the State, however justifiable as a transitional measure, is an essentially unsatisfactory method of industrial finance. In judging applications for State aid, a Government agency is apt to give undue consideration to the *general* bearing of an industry on the future economic development of the country and not sufficient consideration to the question whether the conditions of business success are present in the *individual* undertaking which applies for aid. The possibility of business success is a matter which Governments are notoriously incompetent to judge, and yet, unless business success is reasonably certain as regards an individual undertaking, Government aid will defeat its own purpose, however important the development of the industry may be for the future of the country. The primary lack of industry in India is not capital, as is often assumed, but organisation; and although it is true that organisation is to some extent dependent on capital, ill-considered provision for the supply of capital will not help organisation but hinder it. Capital ought to find its way only where there is an *effective* demand for it.

(3) Considering, (*a*) the risks of industrial banking in a country where industrial organisation is still backward and the range of choice for investment is so limited, (*b*) the relatively larger amount of capital required in investment banks with their slow turnover and (*c*) the high rate of return which would be expected on long term investments in a country where private investment on good security can still fetch as high a return as 12 per cent, it does not seem likely

that a bank which devotes itself exclusively to investment business would have much chance of success. For the present it looks as if a bank which proposes to deal in industrial finance would have to combine it as a matter of course with the ordinary business of a commercial bank. The recommendation of the Industrial Commission on this point is sound and so is the qualification suggested by them. " It cannot be too strongly emphasised that, in such a case, the clearest possible distinction must be drawn between industrial finance and ordinary banking business. Share and debenture capital and long term deposits may legitimately be used for the former purpose, but short term deposits never, and any attempt so to employ them should be most strictly prohibited, if necessary by law ".*

(4) To secure the widest possible distribution of investments, such a bank in the present circumstances of the country would have necessarily to be a central All-India bank. At the same time to secure close local knowledge of industrial concerns, and maintain continuous contact with them, such a bank would have to be based on a system of provincial and local branches. The best solution, under present conditons, would appear to be the adaptation by legislation of the constitution of the Imperial Bank of India to the purpose of a combined Industrial and Commercial Bank. A clear separation should be maintained between the accounts of the two branches of business, the bank issuing debenture capital for industrial purposes from which alone the needs of industrial finance would be met. To make the change effective, adequate Indian representation should be insisted on both, on the boards of management and on the superior executive staff. The Government should be prepared to subscribe for debenture capital up to a specific proportion of the amount subscribed for by the public and may, if necessary, guarantee the interest on the debentures for a limited period. No guarantee either to contribute capital or pay a minimum interest should be given by the State directly to any industry.

(5) The agency of an All-India industrial bank is clearly unsuitable for small industries and industries subsidiary to agriculture. It is for these industries primarily that the Indian Industrial Commission recommended direct financial assistance by the State. The best

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* Report of Indian Industrial Commission para 290

agency however for the financing of these industries would be a Co operative Debenture bank. In some Provinces Co-operative Debenture banks have been already started and their machinery and resources should be utilised for the provision of initial capital for small industries in rural areas. The funds now distributed as *takavi* loans by the Government should be placed as long term deposits at the disposal of these banks

(6) No arrangement for the provision of industrial finance can succeed so long as the normal rate of interest over the greater part of the country stands as high as it does now. It is an essential condition of the development of industrial banks that there should be a larger and more efficient organisation of ordinary deposit banking in the country. Although the two kinds of banking are essentially different in their nature and operation, it is true to say that in the last resort the most serious handicap to the development of industrial finance is the ill-organised condition of deposit banking.

DISCUSSION ON DR. MATHAI'S PAPER.

Sufficient stress has been laid upon the urgent need of mobilising the capital resources of the country, developing the general banking facilities, providing the special banks for financing industries and of creating a special machinery for the under—writing and company promotion business—all of which would serve as the important means of removing the difficulties of industrial finance in India. What strikes me most from the discussion on this subject is the neglect of the possibility of attracting foreign capital under proper Government control. What we object to is foreign capitalist and not foreign capital. Various foreign countries have solved their initial difficulties about capital by the judicious introduction of foreign capital and have consequently reaped substantial advantages. The Government of India has in the past quite frequently and heavily borrwed foreign capital for various production purposes like the Railways, etc. Our present opposition to foreign capital loses a good deal of its force in the case of the capital raised by loans in foreign markets through the agency of the Government of India if necessary. Therefore, if need be, this source of capital for industrial purposes should not be lost sight of

Professor B. L. Vajpayee Bhimpore said :—

" Mr. Chairman and friends—I am glad that Dr. Mathai has introduced a new subject in the discussions of this year's Conference, for excepting his paper and those on Indian Mercantile Marine the attention of the Conference this year seems to have been concentred upon one subject only possibly because of the presence of the member of the Taxation Enquiry Committee or perhaps because the conference thought it desirable to specialise one branch of Economics."

" In his Paper 'Industrial Finance', On page 9, Dr. Mathai says., 'In the other states no general programme of industrial development of state assistance is discernible and such assistance etc., etc.,'. I strongly object to such a statement. He has said so possibly because he is living in the distant South and has had no experience of the Native states in the North and Centre of India. In my own Gwalior States there is a regular and systematic method of State Aid to industries through the State Trust Limited. Only of late there is a Bill published for the establishment of Commercial and Industrial Banks in all parts of the State. Under such circumstances I don't think Dr. Mathai is justified in passing such a sweeping remark".

Professor Duraiswami Aiyar said:—

" There is much to be said in the circumstances of the country for Dr. Mathai's contention that the Imperial Bank should do a certain amount ot industrial banking. It is true that the safe-guarding of the money of the deposits is the first and foremost concern of the Imperial Bank and consequently the advancing of money to industrial concerns must be done with great caution. Especially when we have a highly paid and efficient staff in the service of the Imperial Bank and when large Government funds are placed at the disposal of the Bank, it stands, and that in a strictly limited manner and to a limited amount the Imperial Bank may lead the way in the matter of industrial banking. The Tata Industrial Bank has not been a success and part of the explanation consists in the psychology of the Indian investor. In times of demand the shares go up in price much further and in times of depression they go down much further than their earning capacity justifies. In these special circumstances there is a strong case for Dr. Mathai's proposal that the Imperial Bank may open an industrial side."

INDIAN MERCANTILE MARINE

By

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The problem of accelerating the industrial development of India has received serious and careful attention, in all its aspects, from the public, during the last decade with the result that the Indian public opinion, with the help of certain favourable circumstances, has been able to force the Government of India to give up the time-honoured *Laisser-faire* policy and to accept a policy of encouraging the development of industries in India by means of various State devices. In as much as a national mercantile marine is one of the factors that contribute to the industrial progress of a country, the question ot developing an Indian mercantile marine is one of the important Indian economic problems of the present day which this Conference has been called upon to consider.

It was brought into prominence by a debate on the subject in the Indian Legislative Assembly in 1922 and the consequent appointment of the Indian Mercantile Marine Committee in 1923. In view of the fact that the policy of the foreign shipping companies, which at present supply most of the transport facilities to the sea-borne trade of India operates to the disadvantages of Indian industries, it is good that Indian public opinion has awakened to the necessity of developing an Indian mercantile marine. The postponement of this question would be detrimental to national interests. Such a subject ought to have been considered along with an all-round general scheme for encouraging industrial development of the country. But, unfortunately, the attempts in this direction have been usually half-hearted ; as for instance, the question of the Tariff policy was excluded from the scope of the enquiry of the Industrial Commission 1916, the question of the mercantile marine or the shipping policy was not included in terms of reference to the Indian Fiscal Commission, the question of the inland—waterways has been left out by the Indian Mercantile Marine Committee, while as a matter of fact all of them ought to go together. However, the Report of the Mercantile Marine

Committee published in 1924, is one of the very few of the Committee and Commission Reports which are national in tone and outlook. Its recommendations are generally speaking satisfactory in so far as they go, and are adequate for the purpose they are intended to serve. One may only wish that the Government would see its way to take effective and early action on the basis of these recommendations.

Briefly stated the problem is this. While history bears an eloquent testimony to the past greatness and prosperity of the Indian shipping industry, its present decline is never-the-less impressive. The proportion of the coastal trade carried in ships owned by Indians is comparatively small (10%), while the number of Indian ships which take part in the overseas trade is practically negligible (2%). The experience in modern ship-building in India is also very limited as to the number and size of ships. The trade of India has therefore practically become the monopoly of foreign shipping companies, especially the British shipping companies. They try to favour the interests of their own countries in the export and import trade of India, by giving preferential treatment to their national commercial houses engaged in the Indian trade, in matters of freight rates and shipping facilities. In other words, they encourage the present lines of Indian trade, *viz*, export of raw materials and food-stuffs and import of manufactured goods. Rates have been so fixed as to press more heavily upon Indian goods conveyed from one Indian port to another than upon those conveyed between India and foreign countries. Such disparities more than neutralise the natural protection, which an industry might expect to receive in its own country by reason of the distance of foreign manufacturing centres. On the whole, the policy of the foreign shipping companies which encourage foreign interests is not only unfavourable to industrial development of the country but has also a danger that it may be manipulated in order to nullify the effects of the present protectionist policy, which is obviously detrimental to foreign interests. If nothing else, this alone ought to make every public man, interested in the economic progress of the country alive to the economic significance of the problem of an Indian Mercantile Marine.

The root cause of the whole trouble is the British Shipping Monopoly in India. The best remedy would be the development of an Indian Mercantile Marine. Whatever may have been the historical causes of the present backwardness of the Indian Shipping Industry, the condition which at present militates against the development of shipping enterprizes by the people of this country is the strong position established in the Indian trade by certain British Shipping companies which enables them to stamp out Indian competition by questionable means, such as, deadly rate wars, the Deferred Rebates System which secures perpetual loyalty of shippers and the discrimination against the "disloyal" shippers who are penalized in various ways. The Deferred Rebates System is thus obviously harmful to our economic interests and should therefore be abolished by law. Its legal prohibition would undoubtedly remove an important obstacle from the path of Indian Shipping. Various other countries have also legislated definitely against the Shipping Monopoly and its weapons, Deferred Rebates System and Rate-wars.

There are also other important grounds on which the development of an Indian Mercantile Marine is desirable.

(*a*) It would lessen India's dependence upon foreign shipping companies which reduces her trade to utter helplessness in times of war, as for example, the shortage of shipping facilities during the war.

(*b*) Profits of freight rates variously estimated between 35 and 50 crores of rupees would be saved from going to foreigners.

(*c*) Shipping and ship-building would open new avenues of employment to Indians who at present experience a great difficulty in obtaining suitable and profitable employment

(*d*) Instead of the unfavourable policy of the present foreign shipping companies an Indian Mercantile Marine can by a suitable policy encourage the special interest of Indian trade and industries

(*e*) It will serve as a nucleus of a future Indian Navy and as a second line of defence.

With the favourable conditions such as geographical situation extensive coast, natural harbours, sea-faring population, large traffic and suitable rivers, the Indian Mercantile Marine can be created and developed without insuperable difficulties, only if the artificial conditions which act against it are removed and shipping enterprize and

and ship-building skill are encouraged by proper means. Next to the abolition of artificial obstacles, what is mainly wanted, is the policy that will stimulate enterprize and inspire confidence in the investing public.

With the double objects of securing the largest possible share of ocean commerce to national merchant fleet and of making the ocean traffic subservient to the interests of the production and commerce of the country the State measures for the encouragement of shipping in other countries have taken one or more of the following main forms :—

(1) the navigation laws;
(2) construction and navigation bounties ;
(3) postal subsidy ,
(4) admiralty subsidy ;
(5) reservation of coastal traffic for national ships ;
(6) cheap loans;
(7) preferential railway-rates.

It is important to note that almost all the countries except Great Britain have reserved their coasting traffic to national vessels. In Great Britain, however, where there is no legal reservation, 99% of her coastal trade, is carried by British ships. The history of all the maritime countries in the world, from which Great Britain is not excluded, proves that State aid in one form or another has played a very important part in the development of a mercantile marine.

With this background, it would be now convenient to proceed to the recommendations of the Indian Mercantile Marine Committee. The Committee's recommendations are of three kinds. The first set of recommendations which are quite adequate and which therefore must be accepted in toto, refers to the provision of training facilities and of employment security for the Indian executive or deck officers and engineers for the mercantile marine. But the provision of training facilities, though by itself an important step, is not considered enough for the purpose in view. The second set of recommendations, therefore, refers to the gradual reservation of the Indian coastal trade for the ships which are owned, controlled and managed predominantly by Indians. With this object in view a License System has been proposed under which, only those ships of the existing British Lines which are not more than 25 years old, and which have been regularly engaged in the coastal trade for the year preceding the proposed legislation, and which are prepared to employ a certain number of Indian apprentices and to gradually Indianise their officers and engineers, are entitled to take part in the Indian coastal trade. All ships seeking admission after the legislation on the subject can only obtain licenses if they are registered in India and owned, controlled and managed largely by Indians, and if they comply with the conditions regarding apprentices and Indianisation. In this connection the Committee has wisely said that it is not at present possible to make it a condition that the officers and engineers of the ships asking for licenses must be completely Indians. Of course, in the coastal trade regulation proposed by the Committee, sufficient provision has been made for the compulsory but gradual Indianisation of the personnel. Nor has it been found possible to provide that all the ships applying for licenses, shall be built in India, for there is no modern shipbuilding on a large scale in India. Consequently the third set of recommendations refers to the measures for the encouragement of modern large scale of shipbuilding industry in India, such as, construction bounties, and cheap Government loans subject to certain minor modifications This scheme on the whole, appears to be quite a practical one. The only question is whether the Government is going to give effect to it.

The Committee has quite rightly said that there is at present no necessity for recommending other forms of State aids than what they have actually advised in their Report, for the purpose in view. However, they have taken care to recommend that if a sufficient number of Indian officers and engineers are available, and if the Indian success in coastal trade is proved, the question of Navigation Bounties to Indian ships in over-seas trade should be favourably considered. The license system as proposed by the Committee would obviously take some time in developing the purely Indian Mercantile Marine. In order to facilitate its growth the Committee has proposed that the Government should by means of a loan or with the help of private enterprises buy off one of the existing British lines in Indian trade as a going concern and then should gradually transfer the same to some Indian companies which may come forward to purchase a successful concern like this. Another proposal to speed up the progress of a mercantile marine is that the shipbuilding industry on modern lines should be encouraged by pioneer ship yards laid down and run on account of the Government. This method will surely require the Government to find out large capital and will obviously take a long time to build a sufficient fleet for the coasting trade. The Committee, therefore, prefers the less costly method of purchasing ships out of India in the initial stage. It has been estimated that not more than 10 crores of rupees would be necessary for buying a number of steamers enough for the coastal trade. The License Scheme proposed by the Committee is slow but less expensive; the other method of buying necessary ships out of India is quick but more expensive ; while the method of pioneer ship yards built and run on account of the Government makes the problem of Capital still more difficult. Considered from any point of view, the question is therefore one of finding sufficient Capital for the purpose of developing a mercantile marine.

The view that Indian Capital is shy for new undertakings is becoming out of date. The difficulty of finding Indian Capital, which some years ago seemed to be quite a serious obstacle in the way of the industrial development of our country seems to be vanishing gradually under the influence of new ideas bred of education, new banking facilities and a new national enthusiasm for the employment of Capital in industries. Capital has always come forward for those enterprises which have proved successfully profitable and is in fact, invariably coming forward even for the unfamiliar enterprises which are likely to prove profitable and which have been undertaken by tried and trust worthy directors. What is wanted is a policy which will inspire confidence in the owners of Capital. What is lacking, therefore, now is more often the opportunity than the will. Again the possibility of attracting foreign Capital under proper Government control should not be forgotten. Various other countries have also solved their difficulty about Capital in its initial stage by the judicious introduction of foreign Capital and have consequently reaped substantial advantages. The Government of India has in the past quite frequently and heavily borrowed foreign Capital for various productive purposes ; and there seems to be no reason why the Government should not do the same thing for developing a mercantile marine, for shipping is not less productive than railways.

On the whole, in view of several initial difficulties, India does not stand to lose anything, and it will gain immensely if it only adopts in the beginning the License system recommended by the Committee, combined with their proposals regarding the buying off a line of steamers from the present British Shipping Companies in Indian Trade, the gradual development of shipbuilding industry by construction bounties and cheap Government loans and if possible by Government pioneer ship-yards and training facilities. This will be quite sufficient at present for creating an Indian Mercantile marine for the coasting trade; which may thereafter be encouraged to participate in the ocean trade of the country by various devices such as navigation bounties and other forms of subsidies.

"A MERCANTILE MARINE FOR INDIA."

By

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Indian public opinion was recently awakened regarding the necessity of a national Mercantile Marine when in pursuance of a resolution moved in the Assembly by Sir Sivaswami Iyer, a Committee was appointed by the Government of India in February, 1923 to investigate and report what measures can be usefully taken for the development of an Indian Mercantile Marine It is however rather unfortunate that just as the question of tariffs was omitted from the terms of reference to the Industrial Commission in 1916, and as the question of land-revenue is omitted from the terms of reference to the present Taxation Enquiry Committee, the question of inland waterways (river traffic and trade) should have been omitted from the terms of reference to this Committee This Committee submitted its Report early last year. Its recommendations, though satisfactory in as far as they go, do not go far enough.

Thousands of years before the advent of the British, and upto only less than 200 years ago India was renowned for her excellent Merchant Marine, and her vast maritime trade and her ships were manned and financed by her own sons, built in her own yards out of her own materials. Her ship-building skill has won for her many an unstinted praise from foreigners Unfortunately, the Sovereign power of Europe in whose hands the destiny of India was placed, in its zeal to develop her own Marine, not only showed no concern and made no attempt to maintain the proud position of India as the Mistress of the Eastern Seas, but deliberately allowed it to be gradually destroyed by unfair foreign competition.

Her present position is a very deplorable one. That the Indian share today in the carrying of the large coastal traffic amounting to about 55 lacs tons (freight money being approximately 12 crores rupees) only 13%, and in the overseas traffic amounting to about 130 lacs tons (freight-money being approximately 43 crores rupees) only 2%, clearly shows that our shipping industry is at present a moribund industry. As a result there is an annual net economic drain of 50 crores rupees(1) by way of freights due to non-Indian shipping companies having dominated or virtually monopolised our water-transport, both coastal and overseas.

Analysing the causes responsible for the present state of our shipping industry we find that the most important among them are the destructive policy adopted by the existing foreign shipping companies by combining to maintain their monopoly through (1) The Deferred Rebate System (a method by which a part, usually 10%, of the aggregate freight is being returned to the shipper on condition that during the next twelve months he does not ship any goods by any vessel not belonging the the 'Ring' or 'Conference' and which virtually binds down the shipper to be 'loyal' to this Conference in perpetuity for fear of losing his rebate and also being penalized by denial of space for subsequent shipments), and (2) Deadly Rate-war against the new ship-owner (a method by which the existing monopolistic concerns, who have their previously accumulated earnings to fall back upon, begin to cut down their rates even at a loss with the deliberate intention of throttling the budding venture and thus when competition is annihilated, they raise the rates of freights), and the policy of Laissez Faire, of complete inactivity, of the British Government in India which could have, but evidently have not utilised for its development any efficacious resources like the reservation of the carriage of Government Stores and Mails for Indian ships alone, and preferential railway rates and rebates from custom duties for goods carried in Indian vessels, etc.

India like every other self-sufficing nation stands in urgent need of having a well-equipped and efficient national Merchant Marine which would be of great importance for her commercial, industrial and economic development, and would serve as a naval auxiliary in time of war or national emergency when it cannot depend upon foreign ships to carry its trade. It is a commonplace of Indian Economics that the Railway-rates of today have a depressing effect on the indigenous industries. "But", observes Mr. Haji in his 'Economics

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1. S. N. Haji's "Economics of shipping" 1924. Findlay Shirrass estimates it at 22·15 Crores Rs. only. Other writers, like K. T. Shah, put it between 30-35 Crores Rs.

of Shipping', "a study of the the ocean freights will show that the same charge can be levied with greater force against the existing foreign steamship companies". The Indian Fiscal Commission has also complained that Indian goods are handicapped in transmission in comparison with goods from foreign countries, and rates are in existence showing a great disparity between the charges on goods shipped from one Indian port to another and those on goods conveyed between India and foreign countries. Therefore the development of a national Mercantile Marine becomes highly essential, if only to ensure the general development of other indigenous industries, by the prevention of framing of injudicious freight-rates and of inadequacy of facilities, both of which operate unfavourably on them and nullify to some extent any tariff protection extended to them. In the deplorable absence of any active guardian of the interests of this poor land, as shown above, its natural resources are being thus mercilessly exploited by foreign shipping companies who get preferential treatment from their respective countries.

The national Merchant Marine will facilitate the attainment of an industrial India by giving the much-needed stimulus to our manufactures by finding new markets, by giving requisite special treatment, by manipulation of tariffs and by managing the entire oceanic traffic in the interests of the people of India. And what is more, it will expand the volume of trade between the small ports neglected today, open new waterways, develop coastal ports, cause traffic to be shipped economically by charging low rates and by making it undergo the least transhipment. Further more it will bring about much desired relief to the inhumanly-treated deck-passengers. And last by it will open out a fresh and a profitable avenue of employment for many Indians, and thus help to relieve the pressure on agriculture.

It is well-known that India has a coast-line extending over 4500 miles with an annual coastal trade exceeding in value 200 crores rupees. Her seaborne trade reached the huge sum of 673 crores rupees in 1922. There is, therefore, no fear of paucity of traffic. As seen above, the Stores of the Government of India, amounting to 20 crores rupees, and the Mails, would provide a homeward cargo to our ships and some rebates on custom duties, as in the United States of Amercia, for goods carried on indigenous vessels would also go a great way towards ensuring sufficient traffic. Besides, India has large and suitable navigable rivers for inland transport, like the Ganges and the Irrawaddy, has natural harbours adequate for her present needs, and also has the necessary sea-faring instincts, for an efficient Marine, in her people.

Several attempts to start Indian shipping companies have come to grief because of the questionable methods of the Deferred Rebates and Rate-wars employed by the existing monopolistic concerns forming shipping 'rings' or 'conferences'—call them 'conspiracies'—with a view to strangle the new competitor. Mr. Seshagiri Ayyar had cited before a joint-session of the Legislative Assemly and the Council of State, a painful instance personally experienced of rate cutting by the British India Steam Navigation Company to kill a new venture. He said that the Company even went to the length of carrying passengers from Tuticorin to Colombo absolutely free, and when the new company was killed it returned to its old rates. A still more painful and singular instance was cited by one of the witnesses in his oral evidence before the Indian Fiscal Commission. He observed that in the process of undercutting the competitor in rates, the Company not only carried passengers to Rangoon free but over and above presented a handkerchief to each of them! Similar instances of rate-cutting are on record with regard to goods traffic also. As a first step, therefore, in the direction of developing a national Mercantile Marine, the Deferred Rabate System pronounced by the Indian Fiscal Commission as one of the strongest buttresses of monopoly which is detrimental to our economic interests, must be declared illegal, as in the United States of America, and the waging of unscrupulous and unfair Rate wars rendered impossible by fixing minimum rates, and the charging of high monopoly freight-rates from the shippers, which is very common, should be put a stop to by fixing maximum freight-rates (as in U. S. A.). The next step ought to be the complete reservation of the coastal trade of India and Burma for Indian Shipping Companies alone, as in U. S. A., France, Japan, Italy and other maritime nations, with the solitary exception of Great Britain which has not done so because over 98% of her coasting trade is in the hands of its own shippers. By Indian companies is to be understood those companies which are almost wholly managed and financed by Indians and at least 75% of whose shareholders and directors are Indians. This will save us the annual economic drain of the freight charges amounting to many crores of rupees. Even if the conditions laid down by the Mercantile Marine Committee for granting of licenses to non-Indian ships for participation in the coastal trade of India are now adopted and legislation accordingly enacted, it will still preclude the complete reservation of the coastal trade for our ships for 25 years and that too, if care is taken to ensure that no new ships are launched hereafter. In the absence of any ship-building yards just now, we must, in the first instance, annually purchase some steamers, 100 steamers, of about 5000 tons average, being eventually necessary to cope with the present coastal traffic of 5·5 lacs tons. The total cost for the purchase of so many new steamers is calculated to be about 16 crores rupees (12 crores for steamers for goods traffic and 4 crores for passenger traffic). Some apprehension has been expressed by some, in which the present writer does not share, that the proverbially 'shy' Indian capital may not be forthcoming. It has become a hackneyed argument now that Indian capital is shy of investment when there is no profitable or promising result in view, but as soon as confidence is engendered in the minds of the people by the Deferred Rebate System being illegalised and Rate-war rendered impossible, capital to any amount, sufficient even for enabling us to participate in the handling of the overseas traffic, will come forward. The improvement of the banking system by facilitating connections with the smaller tradespeople who hold considerable cash and the establishment of Industrial Banks, such as in Germany or Japan, would, to a considerable extent, solve any difficulty of financing our industries. A suggestion is also coming from some quarters that the expenditure on the development of a Mercantile Marine may well await in view of the pressing need of capital for the expansion of other manufacturing industries. To suggest it is to condemn it. A national shipping and ship-building industry is an asset of great economic value inasmuch as it is like a key industry, widens the market for indigenous products, develops industry, cheapens transport, promises decent employment and support to large number of men, and as suggested above it is an invaluable adjunct to the economic development of the country, and last but not the least, is of such capital naval importance in times of emergency such as war that its strategic advantage cannot be estimated in terms of rupees, annas and pies at all. For all the reasons enumerated above and elsewhere, it is an industry, an essential industry, the development and progress of which can brook no delay.

The proposal of the Mercantile Marine Committee to purchase over, immediately, one of the existing British lines operating on the coast as a going concern, if available, at a fair and reasonable price, is commendable for various reasons. Besides, the Government ought to make early arrangments for the training of Indian apprentices as Deck Officers and Marine Engineers, by the establishment of an All-India Nautical Training Ship at Bombay and as Naval Architects (the best fitted for receiving this instruction being graduates from Mechanical Engineering Colleges) to assist in building ship-yards and ships, by appointing a special staff of instructors in one of the Engineering Colleges, and by other methods, *e. g.*, compulsory acceptance of apprentices by Steamship Companies in India, in accordance with the recommendations of this Committee, so as to bring about at the earliest date the complete Indianisation of the superior personnel of the Mercantile Marine.

The Mercantile Marine Committee appears to have thought that the reservation of the coastal traffic for our ships would be enough for the present. But this would not meet the case. Over three fourths of the annual drain due to freights is due to the absence of indigenous ships in foreign trade. Therefore to prevent that, it is in fact essential for India to participate in the overseas traffic also. And it is possible to develop both the coastal and overseas traffic side by side. Japan is an instance in point This is therefore a perfectly natural and legitimate desire of the Indians which the Government should appreciate and extend necessary help by giving bounties etc. to purely Indian steamers running along particular routes. A question may naturally be raised in Government circles and else where, as to the incapacity, due to poverty, of India to pay any bounties etc unless some suitable measure of fresh taxation were hit upon. An income-tax on freights, as recommended by many witnesses before the Mercantile Marine Committee, may be levied. Mr. S. N. Haji in his "Economics of Shipping" has proposed that "Following precedents within the British Empire, we should lay an income-tax of one per cent upon the freight money collected by vessels engaged in carrying the foreign trade of the country." It is calculated that this tax would bring a revenue of 50 lacs of rupees the approximate freight-money received being 50 crores rupees. The sum can be earmarked and utilised in developing the shipping and ship-building industries of India.

The history of all the maritime countries of the world shows that State aid, under one form or another, has from time to time been extended as necessary, and that it has done a great deal to serve its purpose of developing Shipping. Sir Arthur Froom, in his minute of dissent to the Report of the Indian Mercantile Marine Committee, commits a grievous mistake in the expression of his opinion regarding the effect of the Navigation Laws when he says "Far from flourishing under the Navigation Laws the British Mercantile Marine was in danger of imminent decay due to the restrictions imposed by them." It is, however, well recognised now that the celebrated Navigation Laws of England were of immense benefit to her inasmuch as they efficaciously excluded foreign competition and 'transferred the supremacy of the seas from Holland to England' and they were only repealed when they ceased to be useful for the purpose which originally commended them. Speaking of their effect, even Dr. Cunningham maintains that England's maritime power had grown up under the protecting influence of the Navigation Laws and adds that in the opinion of experts they were serving their purpose and did contribute to the rapid increase of the Mercantile Marine which occurred during the latter half of the 17th century. According to Macculloch (Dictionary of Commerce & Navigation), the English Marine doubled itself between the Restoration and Revolution. Even today all the maritime nations of the world, big and small, including Great Britain, France, United States, and even Portugal are spending large sums annually in aid of national shipping. It must have been sufficiently clear by now that similar active State aid is an absolute essential for the development of our Mercantile Marine. And it is difficult to agree with the recommendations of the Mercantile Marine Committee that as the reservation of the coastal trade will confer a 'substantial advantage' upon our shipowners there is no justification for the grant of any other form of State aid. Besides, a Capital point advanced by this Committee against granting active State aid is that it will 'save much expense which a system of bounties and subsidies would involve". This argument on the very face of it is a weak one. If the country really lacks the wherewithal to help from amongst its resources at present, an income tax on freight-money which will be productive and again not be felt oppressive may be levied as suggested above. Grudging expense on an object of such supreme national importance like this is bad economics and worse politics, which must needs be unacceptable to a growing nation. In passing, it may be noted that the dangers of "bolstering up a Mercantile Marine" by the reservation of coastal traffic, State aid etc., and of high freights, inefficiency of service etc., resulting therefrom, mentioned in the minute of dissent to the Report of the Mercantile Marine Committee by Sir Arthur Froom, are only the figments of his imagniation which do not merit our serious consideration. Besides, it is problematical as to when the Government will take necessary steps even for the reservation of the coastal traffic.

Further, in order to be self-contained India must build all the ships required for her Mercantile Marine, in her own ship-yards and in order to induce the shipowners to do so, such protection must be granted as would make up the difference between the minimum cost of production here and abroad. The experience of steel-ship building in India being very limited at the present time, it would be thankful if the Government took the lead and established and maintained for a few years, at least one ship-building yard to serve as a model.

It is not intended to catalogue here the various forms of granting State aid to a Mercantile Marine but it only remains to show that further State aid which, let me repeat, is highly essential, for the creation of a Mercantile Marine for India should proceed on the following lines :—

(1) Navigation-bounties to Indian ships going along particular routes where they meet with foreign competition, and Construction-bounties on steel-ships built in our ship-yards.

(2) Loans at low rates of interest.

(3) Preferential Railway-rates and Rebates on custom duties for traffic carried in Indian vessels.

(4) Free admission (exemption from protective duties) to ship-building materials.

If the Government of India perceive and appreciate the economic and political gains resulting to the country from the possession of a national Mercantile Marine, and if in view of that they extend the requisite State aid highly essential to the development of the Mercantile Marine on the lines of the suggestion made above, India will before very long come to own a first-rate and efficient national Mercantile Marine the significance and economic value of which have been unmistakably realised by every progressive nation.

NOTE.

It is regretted that Professor K. T. Shah was unable to send his Paper to be in corporated in this issue.

S. K. RUDRA, M. A. (CANTAB)
Managing Editor.

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